

Supporting First Year Alternatively Certified Urban and Rural Intern Teachers
Through a Multicomponent Distance Induction Program

by

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ABSTRACT

The pathway for entering the K-12 classroom as a teacher varies compared to what was once the traditional model of teacher preparation. In this mixed-methods action research study, I explore supporting first year alternatively certified urban and rural intern teachers through a multicomponent distance induction program. The induction model in this study was based on the theoretical framework of Bandura's social learning theory and Wenger's communities of practice. The purpose of this study was to identify the extent in which a multicomponent distance learning induction program impacts first year intern teachers' sense of self-efficacy, understand their successes, their challenges, and to identify how intern teacher evaluations change. Quantitative data included results from a self-efficacy survey and the Student Teaching Assessment Instrument (STAI).

Qualitative data was collected through intern teachers' blogs, cadre leader video narratives, and cadre leader STAI narrative responses. Six themes emerged including topics such as building relationships with other education professionals, receiving feedback from the cadre leader, identifying struggles and application of college coursework into the K-12 classroom. Key findings reveal interns are least efficacious in student engagement, relationships with other educators support an intern teacher emotionally and pedagogically, intern teachers struggle with work-life balance, and cadre leaders observed intern teachers as having improved their skills in student engagement, instructional practices, and classroom management. Implications to practice include a structured approach to introducing student engagement, creating a best practices library of video examples, and a pre-orientation (Super Saturday) of topics prior to stepping into the classroom with students.

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“The greatest joys in life are found not only in what we do and feel, but also in our quiet hopes and labors for others.” – Bryant McGill

I always knew I wanted to be a teacher. I was the student who drove her teacher crazy asking for ditto sheets and other treasures from half completed workbooks to well...more ditto worksheets! I used these treasures to play school with the neighborhood kids all summer long.

When it came time to select a major in college, it was no surprise to my father (Robert Nicholson) that teaching was my career choice. He was the one who had said that I was one of the few people that always knew what they wanted to do. Some parents may try to convince their child to pursue other career choices due to the lack of money teachers earn; my father’s only quiet hope was that I would minor in computers because after all computers were going to change the future. Following his advice, I began my career in the early 90’s with a major in teaching and a minor in computer science. The combinations of these two are the touchstone of who I am and what I contribute to the educational field. Thank you Dad, for always supporting me and my labors as I pursued my life-long dreams!

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Chapter 1

Introduction

Between 1990 and 2000, Arizona experienced a considerable population growth of 43%, creating a problem for those seeking teachers for the classroom (Parker, 2009). School districts across Arizona relied on teachers with emergency certificates (certificates that did not require passage of exams or enrollment in a teacher preparation program) to fill these positions. Most emergency certified teachers in K-12 classrooms were not required to demonstrate proficiency in the subject matter that they were teaching and had little to no experience or training in classroom management, instructional planning, or student engagement. For example, in 2004, the *Arizona Republic* reported that 2,614 teachers were teaching on emergency certification (Kossan, 2004). The 2004-05 school year was the last year in which the 2002 Reauthorization of the Elementary and Secondary Education Act, No Child Left Behind (NCLB) would allow states to issue emergency certifications without penalties (Kossan, 2004). In light of this, Arizona Superintendent of Instruction Tom Horne proposed a solution:

Currently, districts are giving emergency certification out to people who have a bachelor's degree and are training them to be teachers. What we are proposing is a more systematic approach that makes sure teachers get intensive mentoring from experienced teachers. (Kossan, 2004).

Horne's goal was to create an organized program for certifying teachers through intensive mentoring by experienced teachers that was more flexible than the traditional routes to certification, yet more structured than the emergency teaching certification process. As a result, on May 25, 2004, Tom Horne, won a battle with the Arizona State Board of Education, allowing for the creation of a new program that would ensure quality

of training and lessen the long-standing barriers to certification. Those barriers included requirements normally found in a traditional teacher preparation program, such as the length of time to complete coursework and student teaching experiences that require an unpaid teaching mentorship with an experienced teacher. Horne stated,

Until recently, someone with a bachelor's degree in another subject, who decided to become a teacher, would have to undergo another two years of full-time education. Most could not afford this. There are now ten month compressed programs, but this is the first time it has been planned for people to be able to move into the teaching profession without any time off from work. Arizona has a great need for increased quantities of highly qualified teachers, and we are determined to break down artificial barriers to entry into the teaching profession by bright people with subject matter knowledge. (Kossan, 2004)

In Mr. Horne's program, a teaching candidate could follow an alternative post baccalaureate path, called the Alternative Secondary Pathway to Certification (ASPC), in partnership with self-selected school districts. This program required a 6-week summer boot camp to teach the basics of teaching before the candidates entered the classroom.

The ASPC program was based partially on the Teach for America (TFA) model, which contains the boot camp element through a program of intensive training during the summer months before the school year begins. The theory behind the need for the ASPC program, according to Tom Horne, was that veteran secondary teachers lacked sufficient content knowledge (Kiser, 2004). Horne captured the problem in a December 8, 2004, press release:

There are a number of people with high content knowledge who would like to teach: biologists who would like to teach biology, engineers who would like to teach mathematics, etc. It used to be that they would have to take two years out of their career to go back to school and most could not afford to do that. Under this pilot project, they will have intensive training in the summertime in how to teach, and will go right into the classroom, and will receive heavy mentoring. If they are successful, they will eventually become certified as teachers. (Arizona Department of Education, 2004)

Often these successful candidates had careers in fields such as engineering, science, or law and were either retired, laid off, or wanted to change professions for a teaching position in the core academic secondary areas (math, science, English, and history, Kiser, 2004). Candidates in this program were required to hold a bachelor's degree, have a 3.0 GPA, pass an Arizona Educator Proficiency Assessment (AEPA) content area exam, and have a college major or 24 college credit hours in a core academic area (Hardy & Gaona, 2007). The ASPC program did not require college credits in teacher preservice training, but instead required participation in an intensive summer program (boot camp). The purpose of the summer boot camp was to provide the pedagogical basics of teaching to these candidates before they were placed in the classroom teaching on an intern certificate, which had more requirements than the emergency certificate (Kiser, 2004). The school district that partnered with the ASPC program then committed to hiring the teacher and provided a mentor to work with the teacher throughout the year (Kiser, 2004).

The ASPC program was funded through the 2002 U.S. Department of Education Transition to Teaching Grant (Transition to Teaching Grant, n.d.). When the grant was over, so was the era of the ASPC program, yet the shortage of highly qualified teachers remained a prevailing issue. In direct response to this shortage, Black Water College (the actual name of the college and program have been replaced with a pseudonym for anonymity purposes) initiated the Resident Teacher (RT) program as an alternative to the ASPC program. The RT program is an affordable, flexible option to assist districts and charter schools with filling vacant positions needing highly qualified teachers.

Situational Context

Initially, the purpose of creating an alternative path to certification was to increase qualified teacher applicants. The number of students in teacher education programs was minimal at a time when districts were facing an epic teacher shortage in both rural and urban districts as a direct result of rapid growth across the state (Parker, 2009). *The Arizona Republic* reported as recently as 2009 that the three state public universities were not projected to produce enough teaching candidates to fulfill the increasing demands (Parker, 2009). The low number of teacher education graduates from the three state public universities could not keep up with the demand of teachers needed in the field. The issuing of emergency teaching certificates was at an all time high just as the need for highly qualified certified teachers (requiring passage of a content knowledge exam or 24 college credit hours in a content area) was mandated by NCLB. Black Water College was approached by the Arizona State Department of Education to create an alternative option similar to Superintendent Tom Horne's ASPC program. As a result, Black Water created the Resident Teacher (RT) program, utilizing the intern certificate issued by the State Department of Education.

Black Water College's Resident Teacher program was designed to conform to the requirements of the intern certificate. Intern applicants must possess an Arizona fingerprint clearance card, pass the Arizona Education Proficiency Assessment (AEPA) content exam or an equivalent alternative, and have a letter of intent for a full-time teaching position in an Arizona K-12 school district or charter school. School districts and charter schools seek highly qualified teachers to meet the educational needs of students and to avoid notifying parents of employed teachers who are not highly

qualified, as required by NCLB (Petersen & Young, 2004). Teachers on an emergency certificate are not considered highly qualified and must be reported to the Arizona State Department of Education (ADE) on a yearly basis. Although other states have similar intern certificates, those issued by ADE are only valid in Arizona.

The requirement for passage of the AEPA or equivalent alternative assessments is what makes intern teachers considered highly qualified compared to teachers with emergency certificates. If an AEPA exam does not exist for a certain content area, then 24 credit hours of college coursework in the content area is required. Such areas include physical education, psychology, physical science, and music. Alternatively, if an intern applicant holds a master's degree in the content area, the AEPA exam is not required. Within the last 3 years, the Arizona State Department of Education began accepting another nationally recognized teacher examination, Praxis, in lieu of the AEPA, allowing additional intern applicants with passing Praxis exams from other states to attain the highly qualified status in Arizona (Arizona Department of Education, n.d.-a). The impact of the NCLB requirements for a highly qualified status was a major reason for the decrease in the number of emergency/intern certificates issued in the state of Arizona. Those who were once teaching on an emergency teaching certificate were required to either complete requirements to convert to a provisional teaching certificate (certificate issued initially upon completion of a teacher preparation program) or to enroll in an intern certificate program that would convert to a provisional teaching certificate with the Arizona State Department of Education.

Table 1

Emergency Certificates Issued Compared to Intern Certificates

Fiscal year	Emergency Certificates Issues	Intern Certificates Issued
2001-02	2942	
2002-03	3323	152
2003-04	2688	138
2004-05	2637	52
2005-06	2693	107
2006-07	2389	320
2007-08	2576	466
2008-09	2108	491
2009-10	272	490
2010-11	10	549
2011-12	2	483

Note: The request for data permission is in Appendix B. Additional data for (2010-11 and 2011-12) was requested through email as refilling of documentation was not necessary.

The differences between the number of emergency and intern certificates issued are significant through 2008-09 (see Table 1). In 2009-10 forward, the emergency certificate was still issued, although on a very limited basis, through application to ADE, for positions where documented attempts to hire a provisional/standard certified teacher have failed. The emergency certificate does not require enrollment in a teacher preparation program and only requires six credit hours a year to be completed for renewal

of the certificate (renewable for up to three years). The intern certificate requires an application to ADE, fingerprint clearance, a position with a district/charter, passage of a subject knowledge exam (AEPA/Praxis), a completed course in structured English immersion, and enrollment in a teacher preparation program within 2 years (an optional third year was formalized by ADE in March of 2010). Once qualified applicants are accepted into an intern program, intern teachers work full-time in a K-12 classroom while completing teacher certification courses in a two- to three-year period. Intern teachers have the option of becoming certified in the areas of early childhood, elementary, secondary, or special education. At Black Water College, students take 35–51 credit hours, depending on the program of study. A supervisor assigned by the college and a mentor teacher assigned by the district/charter are jointly responsible for the classroom supervision and evaluation of the intern teacher.

Black Water College Context

Initially, I served as the Co-Director of the Resident Teacher (RT) program, focusing primarily on classroom supervision and evaluation. My duties revolved around recruiting, training, and coordinating assignments for the college supervisors who evaluated the RT students in their classrooms. I was also responsible for the supervision of the program curriculum and adjunct faculty members teaching the Black Water College courses which intern teachers took to fulfill their certification requirements. During the 2005-06 school year, Black Water College had a total of 97 RT teachers in 14 districts/charters with 17 college supervisors. By the 2006-07 school year, the program grew to 256 RT teachers in 47 districts/charters with 64 college supervisors. By the end

of the 2007-08 school year, the RT program produced the first set of 139 program completers who qualified to receive their provisional teaching certificates.

Black Water College uses the term *completers* rather than *graduates* for a specific reason. The RT program is a unique program in that it is a post baccalaureate program offered at a community college. As a community college, Black Water College is not authorized to award baccalaureate or master's degrees. Given this, students in the RT program do not receive a degree or community college academic certificate; rather, ADE issues the certificate directly to the program completers. Black Water has a state-approved teacher preparation program which has been approved through rigorous measures to ensure quality, as determined by the evaluation team authorized by the Arizona State Board of Education. It is through this state approval process that the RT program is recognized as an Institutional Recommendation (IR) program. A student who completes all identified requirements of the approved program receives an IR by the college. Each Black Water program completer is issued an IR, which is then taken to the Arizona Department of Education by the student for issuance of a provisional teaching certificate. This provisional teaching certificate is the initial certificate that all beginning teachers in Arizona receive, including those who complete a no internship program. To receive a standard teaching certificate, teachers must successfully teach two additional years following program completion verification. Black Water College is unique as a community college for its ability to offer a post baccalaureate teacher preparation program that results in an IR.

Historical Background of Black Water College

Black Water College is one of ten community colleges in the Madison County Community College District (MCCCD). Black Water College was initially created in the mid-1970's as a "college without walls," specializing in distance learning, which at the time focused on paper/pencil correspondence classes and video-based courses. As the Internet developed, Black Water College saw the potential to move coursework to an online format. The teacher preparation program became the first nationally recognized post baccalaureate online teacher preparation program at a community college (Levinson, 2001). Black Water College's teacher preparation program began in 2001 as a result of a 1998 Arizona State Board of Education rule change, R7-2-604, allowing for community colleges to offer teacher preparation programs (Arizona Department of Education, n.d.-a). The non-traditional arm, RT, was formed in 2005. Since the inception of the Black Water model, similar programs have emerged in Arizona, such as Scottsdale Community College's in-person elementary post baccalaureate program and Pima Community College's online intern certification program. Black Water College remains the largest of such programs in Arizona, with approximately 2,500 students enrolled in its education courses. Of the total enrollment, 300 students are enrolled per year in various stages of the RT program. Black Water College is the second largest teacher intern program in Arizona after Arizona State University.

While the RT program received its share of recognition through newspaper articles, radio publications, and through being named Black Water College's "2009 Innovation of the Year," the RT program staff became disheartened with the number of non-completers in its program.

Table 2

RT Enrollment Compared to Program Non-Completers

School Year	Total Enrolled	Program Non-Completers	Percentage
2005-06	95	35	36.84%
2006-07	247	50	20.24%
2007-08	315	48	15.23%
2008-09	243	37	15.23%
2009-10	249	53	21.29%
2010-11	290	55	18.97%
2011-12	258	41	15.89%

As director of the RT program, I had categorized non-completer RT teachers into four areas, as observed anecdotally through emails from RT teachers, college supervisors, and RT staff. The four major reasons for non-completion were noted as follows:

- Interns were placed on an improvement plan by the school site. Intern teachers chose to leave a position after being placed on an improvement plan, or the school site let the teacher go for not meeting the demands of the improvement plan.
- Intern teachers did not complete required coursework.
- Intern teachers experienced personal issues regarding health/finances/out-of-state relocation.
- Intern teachers chose to leave the profession.

Limited data has been recorded on the exact numbers in each category because intern teachers often do not notify the college of the reason for their non-completion. Another factor limiting data is that districts and charter administrations only sporadically notify the college of placing interns on improvement plans. College supervisors (master teachers who are working with the intern teachers in the field) find that they also are not notified due to lack of communication from either the principal or the intern teacher.

Once an intern certificate has been issued by the ADE, it is only valid for one year regardless of a teacher's degree of success in the K-12 classroom. When an intern teacher either quits or is terminated, the intern certificate remains valid until the expiration date and will not be renewed. At the end of the year, the intern teacher preparation program must validate successful completion of progress, including classroom evaluations and college coursework, to renew the intern certificate for a second year. In the process of verifying successful progress, the college has been able to track those who do not complete the program due to the lack of adequate completion of coursework.

Table 3

Students by Year Who Failed to Complete Due to Lack of Progress in Coursework

School Year	Lack of Progress in Coursework
2005-06	13
2006-07	17
2007-08	26
2008-09	4
2009-10	5
2010-11	20
2011-12	13

**Note:* As of July 1, 2010 to February 1, 2011.

In order to remain teaching on an intern certificate, the intern teacher must remain enrolled in an intern program. The RT program philosophy is that one RT teacher lost to poor classroom performance or difficulties with program coursework is one too many when multiplied by the number of children's lives that he or she impacts on a daily basis during this program.

The RT program has grown exponentially with each passing school year through the 2008-09 school year, when enrollment leveled off. In the Fall of 2008, I was promoted to the position of Director of the Resident Teacher program. The program staff grew to four full-time staff: a director, two support staff, and an instructional coach. As a

team, we became aware of the tracking requirements related to performance issues, both academic and placement-related, that needed attention.

To be in compliance with Arizona Department of Education intern certificate requirements, the RT staff dedicates the majority of their time to tracking intern teachers' college coursework progress, which includes sending updated progress check sheets to the intern teacher, school district/charter representative, and college supervisor three times a year. The RT staff is also responsible for connecting with the college supervisor to obtain performance evaluation paperwork and progress reports completed by the principal at the end of each year.

The Arizona Department of Education (ADE) holds institutes of higher education (colleges) that offer intern programs accountable for the intern teachers' adequate yearly progress, requiring that a college's students complete 50% of program coursework by the end of the first year. Black Water College adds an additional level of rigor by requiring a final grade of B or better in all program coursework; otherwise the course must be retaken.

ADE's definition of adequate progress also takes into consideration the interns' classroom performance, which is based on three observations of classroom teaching; one assessment evaluation tool is completed by a Black Water College supervisor, and the other two observations are completed by the school administration. If the intern has successfully made adequate progress at the end of the first year, the intern certificate is issued for a second year. During the second year, if the remaining 50% of program coursework is completed and accompanied by three more positive classroom

performance evaluations, the intern certificate converts to a provisional teaching certificate.

Although the RT program is very successful, several prevailing issues need to be addressed; for example, intern teachers possess little to no educational experience or teacher preparation coursework prior to entering the classroom. The teacher preparation coursework offered by Black Water College is in a distance-learning format, a new medium for many of the intern teachers. The distance-learning format is necessary, as many intern teachers are often employed in rural locations lacking support, mentoring, and induction programs. However, college supervisors have observed during classroom evaluations that interns face challenges with student engagement, instructional practices, and classroom management during the first months of teaching on the intern certificate. These RT teachers face the dual challenge of being both a first-year teacher and a full-time student completing teacher preparation coursework.

To assist RT teachers in prior years, Black Water College modified a required course to include conference calls, monthly phone conversations with college supervisors and fellow intern peers, with an accompanying PowerPoint on just-in-time topics relating to the classroom. In addition to standard program coursework, the college has also provided support to new interns through a four-hour orientation covering topics such as organizing a classroom, building a classroom community, and navigating the college's learning management system. While these initiatives have proven to be of value to intern teachers, as demonstrated through course evaluations and feedback forms, they are only short-term fixes to the ongoing challenges intern teachers experience at the start of their program. Based on tracking by Black Water staff, interns not only struggle initially with

policies, procedures, and access to courses at the college level, but they also face on-the-job challenges of classroom management, instructional planning, and instructional methodologies at the K-12 classroom level. I suspect it is due to these issues that on average, 21.76% of Black Water College's intern teachers never make it successfully past part or all of their first year in the RT program.

Purpose

As Director of the Intern Program, I am committed to developing techniques to better support and mentor alternative path candidates despite challenges inherent in the RT program, such as the geographical distance between its students and the college and the program's unfamiliar distance learning format. Through this study, my goal was for Black Water College's intern teachers to feel more supported by the college and better prepared for daily classroom tasks so they can continue successfully in the teaching profession.

Research Questions

My study sought to address the following questions:

- To what extent does a multicomponent distance learning induction program impact first-year intern teachers' sense of self-efficacy in the areas of student engagement, instructional practice, and classroom management? In what ways do the intern teachers' student engagement, instructional practice, and classroom management change during the induction process?
- In what ways do interns feel supported in a distance learning induction program?
- How do intern teachers struggle in their first year of teaching?

- How do the intern teacher evaluations on the Student Teaching Assessment Instrument (STAI) in the areas of student engagement, instructional practices, and classroom management change from the September/October observation to the November/December observation? What were the findings of the cadre leader in regards to the intern teachers' performance?

Earlier in this chapter I discussed the issue of non-completion of the intern program. Although it is important to note the non-completion data trends and track this information, non-completion was not a focus of this research study. The completion rates are not addressed in the research questions, yet the research questions were written in hopes that by looking at intern teachers' self-efficacy, the challenges faced and how they feel supported, along with the evaluation of teaching performance would help the non-completion rates. This study took the first step inside the problem of non-completion to identify the data and findings in these areas.

Definitions

For the purpose of clarity and understanding, it is important to define terminology used in this study. The following definitions will apply to terms used throughout the study.

Cadre Leader: An individual hired by Black Water College as a contracted employee with the responsibilities of training intern teachers during the induction process by encouraging the sharing of ideas, supporting and evaluating the intern teacher in the classroom, and reflecting on successes and failures. The cadre leader is the liaison between the college and the intern. The cadre leader is not necessarily an instructor of

teacher preparation courses, but the cadre leader is responsible for the formal evaluations of the intern teachers.

Multicomponent Induction Program: Induction programs for new teachers are support models in the first year of teaching. The induction program is facilitated by individual districts or by groups bringing new teachers into the classroom, such as the New Teacher Center and Teach for America. A multicomponent induction program consists of several different opportunities to monitor, support, and collaborate with veteran teachers and/or other first-year peers. These opportunities can range from group meetings of content-matched peers to classroom observations by a veteran teacher with the intention of providing specific hands-on feedback about classroom practices.

Self-efficacy: Psychologist Albert Bandura (1977a) defines self-efficacy as the self-perceived ability to succeed in specific situations. This sense of self-efficacy by classroom teachers impacts their approach to classroom tasks, challenges, and goals (Bandura, 1977).

The Student Teaching Assessment Instrument (STAI): The observation protocol used at Black Water College is for both evaluation and critique of classroom teaching performance. The STAI rates classroom teaching in areas such as lesson planning, classroom management, and instructional strategies. Each item is scored on a scale from one to five, where a five demonstrates complete competence.

Additional definitions can be found in Appendix C

Chapter 2

Review of Supporting Scholarship

Beginning teachers have started the school year with a steep learning curve compared to that of their veteran counterparts who have spent years mastering their craft (Moir, 2009). District Human Resources often notified beginning teachers of being hired only a few hours to a few months which allowed for little preparation time prior to the upcoming teaching assignment (Moir, 2009). Beginning intern teachers were often left to deliver the most difficult content courses to students who need the most skillful instructors to teach them due to veteran teachers seeking positions in more affluent or higher achieving classrooms (Darling-Hammond, 2000; Hunt, 1968; Moir, 2009). Furthermore, these challenges diminished the passion, excitement, and enthusiasm of a first-year teacher, the intern teacher was left feeling frustrated and disenchanted for the profession (Ingersoll & Smith, 2003). Research has shown that teachers who felt inadequately prepared were more likely to exit the profession (National Commission on Teaching and America's Future, 2009). Induction programs have helped support those who felt inadequately prepared and have significantly impacted a first-year teacher's decision to abandon or continue in a teaching career (Ingersoll & Smith, 2003).

A review of scholarly literature took a multipronged approach. The first prong looked at the historical formation of alternative certification, discussing the positive and negative sides of this option. A review of the literature about alternative certification processes and programs was important to consider as the Resident Teacher (RT) program discussed in this study has been considered an alternative certification program.

The next prong of research literature explored the origination of various induction programs as well as the successful components of model induction programs. An analysis of the successful structures of induction programs helped to identify successful practices for supporting interns in the RT program during their first years in the K-12 classroom.

A third branch of research looked at the practices of distance education that have primarily encouraged isolation and communication only through one-to-one correspondence via email (Gahungo, Derreshiwsy, & Moan, 2006).

The final prong of this literature review discussed the theoretical lens of this study, which centers on the ideas of Etienne Wenger's communities of practice (Wenger, McDermott, & Synder 2002; Wenger, 2008). Discussion described the professional scholarship of Ellen Moir's teacher induction framework as it relates to Wenger's communities of practice (Moir, 2009).

History of Alternative Certification

An alternative pathway to certification has been one way for educational institutions to obtain highly qualified teachers when they are not otherwise available. In 2009, 47 states adopted some type of alternative path to certification (Peterson & Nadler, 2009). Black Water College began to offer the Resident Teacher Program, which utilized the Arizona Department of Education's intern certificate as a hybrid (with online and in-person components) option to obtain provisional certification in the state of Arizona. Black Water College's intern teachers have been employed in over 70 districts and charter schools across Arizona. Black Water College's alternative certification programs

are considered credit-based compared to other alternative programs which have been established as competency-based.

An example of a competency-based alternative program has been offered by the Washington D.C.-based American Board for Certification of Teacher Excellence (ABCTE). Study plan and program checklists are received by ABCTE candidates. Candidates studied a variety of resources such as practice exams, online non-credit courses, and Prepare to Teach workshops on a self-paced schedule. The candidates did not complete experiences within a K-12 classroom and did not complete a supervised student teaching experience unless it was mandated by the state who accepted the ABCTE certification program. To enroll, candidates must have held a bachelor's degree in any subject area from an approved college or university and must have also passed a background check. After passage of the ABCTE Professional Teaching Knowledge Exam and a subject area exam, students were considered program completers. These teacher candidates were not in a degree program and did not earn college credits for completing the program (ABCTE, n.d).

In a 2009 study by Tuttle, Anderson, and Glazerman, student achievement gains by ABCTE trained teachers were compared to those non-ABCTE trained teachers in the areas of reading and mathematics. Florida was selected as the study location given that Florida was the third state to accept ABCTE training for teacher licensure in June of 2004, Florida accounted for the second-highest number of ABCTE alumni, and Florida exhibited the most rapid growth in ABCTE certification in the United States (Tuttle, Anderson, & Glazerman., 2009). The study concluded that ABCTE teachers had no significant differences in student gains in reading as compared to non-ABCTE teachers

(Tuttle et al., 2009). However, students of ABCTE teachers scored lower than non-ABCTE teachers on the state math test (Tuttle et al., 2009).

The ABCTE certificate was accepted in nine states for teacher licensure and attempted to be the only private teacher training firm to be approved in every state to offer teacher certification (Kossan, 2009). Currently, Arizona is not one of these nine states. However, an Arizona Board of Education rule was changed in March of 2010 to allow for genuine alternative path programs to be offered but to this date it is not an approved alternative path program in Arizona (Kossan, 2009).

College credit-based alternative path programs are those that had most closely resemble traditional teacher preparation programs. Peterson and Nadler (2009) found that teacher candidates rarely completed an alternative certification program when the requirements mirror that of a traditional program. In states where the requirements of an alternative path program were extremely similar to those of a traditional teacher preparation program, a higher percentage of teacher candidates completed the traditional program. States that purposely created genuine alternative path programs, which were competency-based not credit-based, that enabled students to gain knowledge through means other than college coursework demonstrated a higher percentage of program completers (Peterson & Nadler, 2009). Superintendent Horne's ASPC program was a genuine program that was approved by ADE's board. At the time, a formal program approval process from genuine alternative path programs was not established until March 2010 by the Arizona State Board of Education. Although Arizona policy allows for genuine alternative path program to be approved in Arizona, no program had been brought before the state for approval to date.

The status of emergency teaching certificates as compared to intern teaching certificates evolved over the years. Prior to 2008, the state of Arizona issued hundreds of emergency teaching certificates each year and was penalized for doing so by federal regulators. This action impacted the operating procedures for emergency certificates, making it harder to continue on an emergency certificate or even to obtain one. In response, Arizona required emergency certified teachers to obtain intern certificates and complete approved college credit-based alternative path programs. Since no genuine alternative based programs were offered in Arizona, only college credit-based programs at colleges and universities such as Black Water College, Pima Community College, Arizona State University, University of Phoenix, and Grand Canyon University were offered. Of the approximately 800 intern teaching certificates issued in Arizona during 2010-11, Black Water College's RT credit-based program accounted for approximately 300 of those interns, the second largest after Arizona State University's Intern Master's of Arts with Certification (InMAC) program. Agencies such as Teach for America (TFA) and Arizona Teaching Fellows (ATF) also utilized college credit-based alternative path certification programs, requiring their members to complete internship classes while receiving additional support from the agency.

The Benefits of Alternative Path Programs

Alternative certification programs were originally established as the answer to the cries of well-educated professionals with degrees in other fields who sought to meet the needs of districts and charter schools that lacked qualified certified candidates to fill vacant teaching positions. As early as the 1980s, President Ronald Reagan's efforts and Teacher Corps programs attempted to reduce barriers for mid-career changers,

businessmen, and military personnel to become certified teachers (Dill & Stafford, 1996). Several education initiatives, such as President Bush's 1988 education proposal to encourage alternative teacher certification and Newt Gingrich's 1995 proposal to eliminate teacher certification rules, were the impetus for alternative certification pathways (Darling-Hammond, 2000). Dill and Stafford (1996) stated that alternative certification programs were one of the "...very few successful long-term innovations and paradigm shifts in the history of education during the 20th century" (p. 24). In 2001, 20,000 alternative certified teachers entered the teaching force (Peterson & Nadler, 2009). By 2006, approximately 60,000 alternatively certified teachers were entering the field, which represented one-fifth of all new teachers (Peterson & Nadler, 2009). This paradigm shift has been met with both praise and criticism.

Alternative certification model programs have not only been praised by those educated professionals wanting to enter the teaching profession without completing a four-year traditional teacher preparation but also by those who faced cultural and economic challenges to entering the teaching force. Traditional teacher preparation programs noted that the demographics of the current teaching force did not reflect the children they teach (Peterson & Nadler, 2009). Alternative certification programs allowed greater options for recruiting minorities into the profession. With reduced barriers to teaching, those who had life experience, maturity, and understanding of cultural issues were able to contribute to the teaching profession (Dill & Stafford, 1996; Peterson & Nadler, 2009).

In a national survey, Peterson and Nadler (2009) found that recruitment of minorities into the teaching profession was difficult. In 2004, only 14.1% of the nation's

teachers were of African-American or Hispanic background, although they represented 26.5% of the general adult population (Peterson & Nadler, 2009). Peterson and Nadler (2009) demonstrated one reaction to those statistics by quoting the past president of the National Education Association, Reg Weaver: “States and school districts need to develop programs...[that] reach out to minorities still in school, offering encouragement and incentives to enter the teaching profession. We need more minority teachers. School districts need to aggressively recruit them” (p. 70). Authors Peterson and Nadler (2009) affirmed, “There is every reason to believe that alternative certification is key to recruiting more minorities into the teaching profession” (p. 72). The 2004 figures showed that minority teachers were underrepresented at a national level.

A purpose of alternative certification programs was to reduce barriers for teacher certification, producing a larger amount of qualified teachers to fill positions during a time of teacher shortages. However, the current state of the economy produced shrinking K-12 budget reducing personnel, which lead to the layoff teachers through reduction in force (RIF) notices. The public believed that we were not in the midst of a teacher shortage. Although a surplus of teachers did exist for certain teaching positions and locations, shortages of highly qualified teacher candidates existed primarily in large urban areas, in rural schools, and in the specialized fields of math, science, and special education (Sindelar, Misra, Boyer, & Rosenberg, 2007). Alternative certification pathways helped to bring qualified teachers to urban schools that were often plagued with teacher shortages (Stoddart, 1993). In Arizona particularly, schools in rural locations with unique characteristics, such as Native American reservations and the Arizona-Mexico border towns, faced shortages of highly qualified candidates. New teachers in

rural areas often moved to a different district after their first year, creating an unstable teaching force in rural locations (Holdman, Harris, M., Clark & Harris, T., 2005).

No Child Left Behind created a tremendous strain on rural schools in Arizona as they tried to find highly qualified teachers to fill their positions (Shaffer, 2006). Many times, teachers in those locations taught out of their certificate area or held no credentials at all for the area(s) in which they taught (Shaffer, 2006). In 2004-05, the National Center for Education Statistics reported that 23.25% of Arizona school districts were in rural locations (Strange & Johnson, 2007). These rural school districts were responsible for educating 17.8% of the state's students, of which 52.7% are minority students (Strange & Johnson, 2007). In a 2006 article in *The Arizona Republic*, Bill Stuart, Executive Director for Arizona Rural Schools Association, stated, "We're in a real crisis situation, and a lot of schools wouldn't be able to open their doors next fall if they couldn't make emergency hires." (Shaffer, 2006). Stuart named the math, science, and special education fields as the areas of greatest need. School districts in Payson and Flagstaff were cited in this article as having to let teachers go due to their not meeting the highly qualified standards, while urban districts offered significant bonuses to those teachers who were highly qualified in areas such as math, science, and special education (Shaffer, 2006). Rural schools needed to take advantage of candidates with Arizona intern certificates, given the interns were considered highly qualified.

The future of NCLB is uncertain as President Obama's administration has looked at the reauthorization of the NCLB law (Jacobson, 2011). President Obama is focused on overhauling the testing component of the NCLB regulations (Jacobson, 2011). Although NCLB has been difficult for rural schools, the alternative of not having NCLB

regulations could once again position students in classrooms where teachers are either not certified or are teaching outside their content area lacking expertise. On a positive note for NCLB, the law forced the need for highly qualified teachers. Alternative paths to teacher certification answered the need of highly qualified teachers by providing opportunities for re-careering adults, minorities, and those living in rural communities.

Resistance Against Alternative Certification Programs

Alternative certification programs are frequently criticized for their practices. Linda Darling-Hammond, known for her research on teacher quality and effective teacher preparation programs, pointed out the negative aspects of alternative certification programs by stating, “Even if one agrees that there are desirable knowledge and skills for teaching, many people believe that anyone can teach, or, at least, that knowing a subject is enough to allow one to teach it well.” (2000, p. 167). However, Darling-Hammond’s work strongly suggested the need for teacher preparation programs to prepare future effective classroom teachers prior to entering the classroom.

Past research has compared the teaching effectiveness of certified teachers from various methods of certification programs. In 1998, approximately 3,000 beginning teachers from traditional (4-year undergraduate programs) and alternative path programs were surveyed in New York City about their sense of preparedness for the classroom (Darling-Hammond, Frelow, & Chung, 2002). Those who completed traditional teacher preparation programs felt better prepared than those who completed alternative path programs in four out of five areas: (1) promoting student learning, (2) teaching critical thinking and social development, (3) understanding learners, and (4) developing instructional leadership (Darling-Hammond et al., 2002). Only in one area, using

technology, did the alternatively certified teachers cite feeling more prepared than their traditionally schooled counterparts (Darling-Hammond et al., 2002). The authors of the study attributed this exception to the possibility that alternative path teachers came from previous occupations that provided more experience with technology. In the area of teaching new English language learners, neither group felt adequately prepared.

Teachers who completed a traditional teacher preparation program also “...demonstrated a much stronger sense of responsibility for student learning...” (p. 288) than did those who completed an alternative path.

Throughout the survey, mean ratings of teachers from traditional programs were significantly higher when compared to the ratings of alternative path teachers (Darling-Hammond et al, 2002). The authors of the initial survey then compared the teachers’ preparedness ratings to their sense of efficacy in terms of being able to make a difference in student learning. When compared, the results indicated that teachers who felt better prepared by their teacher preparation programs were significantly more likely to think they could manage classroom behaviors, teach all students at higher levels of learning, and make a difference in the lives of their students. Teachers who did not feel as well-prepared were more likely to blame students’ lack of learning on external causes such as students’ peers and the home environment (Darling-Hammond et al., 2002). The researchers found that a teacher’s sense of teaching efficacy was not impacted by age or gender, but was instead correlated to the number of pedagogical experiences (observations, teaching, instruction on effective strategies, etc., Darling-Hammond et al., 2002). In conclusion, the Darling-Hammond et al. (2002) study named a teacher’s sense of preparedness as the greatest predictor of teaching efficacy.

How a teacher training program enhances teachers' sense of self-efficacy and preparedness during the beginning stages of their work in the classroom is of vital importance to their longer-term effect on student achievement and to their decision to continue teaching. In a 2000 study by Goddard, Hoy, and Woolfolk-Hoy, data was obtained from both teachers and students in 47 elementary schools. Teachers completed a self-efficacy survey while their student achievement data was collected from the Metropolitan Achievement Test. The researchers found that teachers with a strong sense of self-efficacy "...believe they can reach their students and that they can overcome negative external influences. Given these beliefs, teachers are more persistent in their efforts; they plan more; they accept responsibility for student achievement; and temporary setbacks or failures do not discourage them." (Goddard et al., 2000). Furthermore, the researchers concluded that schools with a collective teacher efficacy (majority of teachers at a single school location have a high sense of self-efficacy) have a higher effect rate on student achievement as compared to the impact of social economic status on student achievement (Goddard et al., 2000). Induction programs (structures for supporting beginning teachers' in the field) provide methods for enhancing teacher efficacy and supporting preparedness.

How a teacher training program enhances teachers' sense of self-efficacy and preparedness during the beginning stages of their work in the classroom is of vital importance to teachers' longer-term effect on student achievement and to their decision to continue teaching. One purpose of this action research study was to describe alternatively certified teachers' perception of self-efficacy in their first four months of teaching as they participated in an innovative distance learning induction program. This

study builds on Darling-Hammonds 2000 statement "...that knowing a subject is enough to allow one to teach it well" (p. 167) by infusing teacher preparation coursework with an intern teacher's strong content knowledge background. The connection between my study and the findings from 2002 Darling-Hammond et al. will further investigate an intern teacher's sense of preparedness by increasing the number of pedagogical experiences (observations, teaching, instruction on effective strategies, etc.) early within the intern teaching experience.

History of Induction Programs

Teacher education has drastically changed since the 1800s, when education was formalized in the United States. Teacher contracts in 1923 stated that a teacher was not allowed to be married or to associate with men and could not smoke, drink, or ride in a vehicle (carriage or automobile) with a man except her father or brother (Apple, 1988). Teacher responsibilities included custodial cleaning duties and keeping the schoolhouse warm (Apple, 1988). In contrast, standards, benchmarks, and student assessments drive the education climate today (Moir, 2010). Arizona's policymakers were looking closely at student achievement and how that achievement could impact teacher evaluations and pay. In 2010, initiatives were underway to assess a teacher's performance partially on the achievement of their students (Ryman, 2010). The added level of accountability created a greater focus on the learning of beginning teachers and on the overall improvement of teacher quality (Schwille, Wang, & Odell, 2008). Induction programs—programs that supported beginning teachers in the classroom—furthered the effectiveness of new teachers. When beginning teachers received the support of an induction program, they made positive progress that impacted the achievement of students (Moir, 2009).

A major conclusion of researchers who studied teacher induction programs emphasized the importance of support for beginning teachers. Hunt (1968) specifically addressed the need to "...bridge the gap between the theory of the teacher training institutions and the reality of the everyday classroom situation..." (p. 131). Consider the intensive occupation of doctors where completion of an on-the-job training component is required before being released in the field to work independently (Ingersoll & Smith, 2004). In education, the concept of on-the-job training is viewed as a barrier to those wanting to join the teaching force. Yet, without it, beginning teachers were left to work in a sink-or-swim environment (Ingersoll & Smith, 2004). Ingersoll and Smith stated that the sink-or-swim approach did not support new teachers leaving them isolated, only to solve problems on their own. The researchers stated that many new teachers decided to leave the teaching profession within the first 5 years, some within only the first year of teaching (Ingersoll & Smith, 2004; Moir, 2009). In contrast, research revealed that new teachers who learned on the job through induction programs with content area/grade level mentors were more likely to continue teaching (Ingersoll & Smith, 2004; Wayne, Fleischman, & Youngs, 2005). In fact, Ingersoll and Smith (2004) came to the conclusion in their study that "...the most effective induction programs offer bundles or packages of supports and, in particular, provide to beginning teachers a mentor from the same field and the opportunity to participate in group or collective planning and collaborative activities" (p. 38). The innovation implemented in this study is based on the work of researchers like Ingersoll and Smith where on the job training through a multicomponent induction program supports intern teachers to alleviate isolation and the

sink-or-swim methods that are normally faced without the support of an induction program.

Models of Induction Programs

In 2009, an estimated 30 states required some sort of mentoring support for new teachers (Moir, 2009). However, such induction programs were not mandated by the Arizona Department of Education. In May of 2004, a committee of practitioners and stakeholders with expertise in induction/mentoring programs came together to outline standards for and create a vision of induction programs in the state of Arizona (Arizona Department of Education, 2005). One of the practitioners at this meeting was Dr. Patty Horn, Director of Northern Arizona University's Teaching Induction Program (TIP), a U.S. Department of Education grant-funded project (Northern Arizona University, n.d.). Representatives from a second organization, Arizona State University, shared their experiences with the project, the Beginning Educator Support Team (BEST). The Santa Cruz New Teacher Center also provided useful strategies for this committee (Arizona Department of Education, 2005). Several other Arizona districts that have created their own new teacher induction programs using their own budget and/or grant resources were also present, including the Washington Elementary School District, known for its 20-year-old BEGIN program (The BEGIN Program, n.d.). To better understand the experiences of each of these organizations, each program will be analyzed in the next section.

Local model #1: Teacher Induction Program (TIP). The Teacher Induction Program (TIP) was developed as a result of findings derived from a telephone survey of 225 public school districts in Arizona completed in 2000 by the Arizona K-12 Center

(Horn, Sterling & Subhan, 2002). In this survey, 52.2% of districts stated that they had no induction program, 30.5% had a low-intensity program (basic orientation, minimal mentoring requirements), and only 17.3% stated that they had a high-intensity induction programs (several days of orientation, on-going regular mentoring, on-going regular workshops/meetings with peers, induction program lasting multiple years, Horn et al., 2002). Five districts partnered with Northern Arizona University to provide the induction program: Fowler Elementary School District, Liberty Elementary School District, Pendergast Elementary School District, Tolleson Elementary School District, and Agua Fria Union School District. The TIP was designed to “provide a formal support structure for new teachers” (Northern Arizona University, n.d.). The TIP structure utilized full-time mentors who assisted new teachers in their classroom performance (as defined by the Arizona Professional Teaching Standards), analysis of K-12 student work, self-assessment, and reflection. Through a professional learning community of beginning teachers and mentors, the goal of the TIP was retention of beginning teachers through common elements of a highly effective teacher induction program (Horn et al., 2002).

Some of Black Water College’s RT teachers were employed by the five districts that participated in the TIP program. The RT teachers were employed as first-year teachers and were awarded all benefits that first-year teachers receive. Although I did not find a formal evaluation of the TIP program, anecdotal reports by Black Water’s College supervisors reported that their assigned RT/TIP teachers were more confident and effective compared to RT’s who did not participate in an induction program. The TIP program was unique to the districts which offered the program and not all RT teachers have had this support structure available to them.

Although specific research on the TIP model has not yet been conducted, best practices identified in the research literature on induction programs are clearly embedded in the model. For example, Ingersoll and Smith (2004) described the isolation that new teachers faced leaving the teachers to succeed or fail on their own. The TIP model addressed this isolation by connecting teachers through in-person and web-based activities. Ingersoll and Smith (2004) also defined teacher induction through a variety of components including classes, workshops, orientations, seminars, and mentoring, all of which were seen in the TIP model and broke the isolation that many beginning teachers felt. In research done by Ingersoll & Smith (2004), three components of induction programs were noted as having the strongest impact on beginning teachers: (a) a mentor from the same field, (b) common planning time with other teachers, and (c) networking with teachers outside of their own school or district. The TIP model incorporates each of these components.

Local model #2: Beginning Educator Support Team (BEST). The Beginning Educator Support Team (BEST) served beginning teachers in an induction program in which Arizona State University partnered with local school districts to provide training, mentoring, and professional development (Arizona State University, n.d.). First-year teachers participated in the BEST program that was comprised of three components: (a) professional development seminars, (b) one-to-one mentor interactions, and (c) standards-based instructional coach visitations.

Professional development workshops comprised the first component of the BEST program. The professional development seminars were workshops geared for new teachers. Workshop topics included: (a) Beginning the Year Successfully, (b) Creating

Positive Interactions with Students and Parents, (c) Balancing Teacher Stress, (d) Developing Corrective Discipline Strategies, (e) Accommodating Student Differences, (f) Understanding Standards for Teachers, (g) Celebrating BEST Practices in Teaching, and (g) Closing Down the School Year (Arizona State University, n.d.). Although little research has been conducted regarding the impact of a professional development component within an induction program, the findings of Schwille et al. (2008) demonstrated that professional development workshops have had only a small effect on new teachers, as those teachers who have completed a teacher preparation program have pre-established beliefs about teaching. Further, depending on the experience of the inductees, the professional development may have been valued by some (e.g. interns without prior pedagogical coursework) but not by others (e.g. those who have completed a teacher preparation). Applying the findings of Schwille et al. to the BEST Program which had both intern teachers and those who had completed a formal teacher preparation program, can one determine the effectiveness of the BEST professional development component given the different experiences that the inductees had?

One-to-one mentor interactions, the second component, took place at specific school sites. BEST Teachers are paired, as closely as possible, with a content/grade level-matched mentor. This mentor's purpose was to meet with the BEST teacher at least once a week and provide site-specific support regarding instruction.

As the final component, a standards-based instructional coach supported the new teacher with classroom visits. During these visits, the coach tailored strategies and best practices to the individual teacher's needs. The role of the coach was to observe and evaluate the BEST teacher on eight teaching standards through a formative assessment

tool. During these coaching sessions, emphasis was placed on documentation of student achievement gains.

The BEST program was similar to the TIP model in that only teachers from the districts that have already adopted the program received this support in addition to the coursework and supervision that RT teachers received from Black Water College. The Black Water College RT program also enrolled teachers in districts and charters that only provided the minimum program requirements for a mentor. Black Water College supervisors, anecdotally compared intern teachers' skills with those intern teachers who had an induction support system such as BEST or TIP. Those intern teachers who demonstrated stronger classroom management, instructional planning, and instructional methodologies skills had completed an induction program in conjunction with their teacher preparation coursework through the college.

The literature in the field also supported the components of the BEST program. The BEST program, comprised of fewer components than the TIP program, had a heavy mentor component mixed with teacher evaluations. In a study by Hall, Johnson, and Bowman (1995), the researchers found that beginning teachers felt that the most important induction component was observing other teachers and being observed by colleagues. The New Teacher Center (2007) found through their research of effective induction models that a multiyear induction model was vital to a beginning teacher's success. The BEST program incorporated the effective components of mentors, teacher evaluations, and a multiyear support span.

Local model #3: BEGIN teacher induction program. The Washington Elementary School District established the BEGIN program in 1987 (The Begin Program,

n.d.). The program is considered the longest running program of its kind in Arizona (The Begin Program, n.d.). The homegrown program was funded through Title I, Title II and Title V Federal Grants for Professional Development and was originally a 1-year induction model. The current program was broken down into three different categories that covered a 3-year period: BEGIN I, BEGIN II, and BEGIN III.

BEGIN I was for the new teacher with 0-1 years of previous teaching experience. The induction team consisted of a grade-level-matched cadre leader as well as a building level mentor. The program required that BEGIN I participants complete a 5-day inservice prior to the beginning of the school year. During the school year, participants attended night meetings, one release day, and a Saturday workshop. Professional development was designed for BEGIN I participants focusing on the Fred Jones Positive Discipline Program, Six-Trait Writing Teaching and Assessment, English Language Learners Program, and the district's Technology Model (The Begin Program, n.d.). The main focus of BEGIN I activities included management of students, time, materials, and space. The BEGIN I program overview stated "The BEGIN I program stresses the importance of BEGIN teachers spending time with each other which, according to the literature on beginning teachers, is a critical variable in the successful induction of new teachers." (The Begin Program, n.d.). Through the structure of the BEGIN I meetings, time was allowed for teachers to spend time problem-solving and sharing ideas with others at their grade level. The cadre leaders' experience and expertise were utilized within these conversations.

The scheduling of the BEGIN program and the hiring of teachers did not always correlate nicely, however. The BEGIN program started one week prior to the start of the

school year, yet the hiring process was often not completed until midyear. In a situation where a teacher is hired after October 31st, a less intensive induction program called the Teacher Support Program assisted the new teacher by assigning a master teacher within a designated grade range. The master teacher met twice monthly with the new teacher and offered necessary assistance. The new teacher was then invited to join BEGIN I the following school year.

Similar to the TIP and BEST programs, Black Water College RT teachers were employed by the Washington Elementary School District and had additional support at the site level. Black Water College supervisors have noted that when used in conjunction with the college's coursework and observation evaluations, the support package provided by the BEGIN program was a powerful way of increasing beginning teachers' effectiveness in the classroom. Although the structure of Black Water College's RT program provided important instruction through the college coursework, the local induction models demonstrated another way to support teachers placed in the classroom with little to no prior teaching experience or knowledge.

The BEGIN program model included similar components to the TIP and BEST models, including an initial orientation, networking with other teachers, professional development workshops, teacher evaluations, formal mentoring, and a multiyear span of time. The orientation component of these induction models had not yet been discussed. In a study by Bickmore and Bickmore (2010), the orientation component was seen by beginning teachers as highly valued despite the fact that their mentors did not believe the orientation to be as valuable. Interviews with the study's participants yielded 27 positive claims regarding the orientation as compared to only three negative claims (Bickmore &

Bickmore, 2010). The New Teacher Center (2007) also cited the incorporation of an orientation component as another best practice within effective induction models.

National model #1: New Teacher Center. Ellen Moir (2009), New Teacher Center Executive Director, stated, "When districts and schools organize to accelerate new teacher development, they break the cycle of inequity and provide children who are most in need of a high-quality education with teachers capable of helping them" (p. 15). Moir saw the impact of induction programs firsthand in her previous position as Director of Teacher Education at the University of California at Santa Cruz (UCSC, Moir, 2009). However, even with induction programs in place, she found that many of the UCSC graduates wanted to leave the teaching profession by October of their first year (Moir, 2009). Due to this experience, Moir's efforts went into developing the induction model that is now used by the New Teacher Center.

The New Teacher Center (NTC) was established at the UCSC in 1998. NTC began operating as an independent nonprofit organization in July of 2009 in order to better serve institutions across the United States (New Teacher Center, n.d.). First-year teachers who completed the NTC induction model had a 95% retention rate as compared to the current national average first-year teacher drop-out rate of almost 50% (New Teacher Center, n.d.).

The NTC attributed the success of their program to several key lessons learned by the organization's founders in 20 years of experience (Moir, 2009). First, an induction program needed to be a system-wide commitment, meaning that new teachers needed to learn about their district's demographics and initiatives. The NTC also learned the importance of conversations focused on standards-based instruction between mentors and

new teachers. A final lesson learned by the NTC is that program evaluation is important. Induction programs needed to have a clear vision, and program leaders needed to routinely evaluate whether their efforts are making a difference. It is vital to have had data collection tools that assessed if the program is successful in its efforts based on teacher retention, student achievement, job satisfaction, and student engagement.

The NTC's induction program contained elements similar to many of the other effective models discussed previously. The difference between NTC and other programs was that its sole purpose for the past two decades had been to develop, implement, and refine best practices for induction programs, whereas other national programs had taken broader approaches to improving teaching (New Teacher Center, 2007). The New Teacher Center's induction program was so extensive (several days of orientation, ongoing mentoring and workshops, regular meetings with peers, and a scope of multiple years) that only one percent of teachers nationwide received support at such a high level of intensity (Ingersoll & Smith, 2004). The NTC induction program was unique in that it focused not only on the beginning teachers' instructional skills but also on their social and emotional well-being (Gless & Bozhino, n.d.). The rigor and dedicated practices honed over time contributed to the NTC induction success of 95% retention of first year teachers.

National model #2: Teach for America. In 1989, Princeton University senior Wendy Kopp pondered the differences between her own academic experiences in a Texas upper- to middle-class community public school and her Princeton University roommate's public school education in Bronx, New York. Having gotten to know two groups of students at Princeton, those who struggled with the academic demands versus

those who referred to it as a “cake walk,” Kopp (2003) felt that something needed to be done so that “[o]ne day, all children in this nation will have the opportunity to attain an excellent education” (p. 185). The beginning efforts of Kopp’s Teach for America program came to fruition in 1990 with 2,500 applicants, of which 500 teachers were selected (Xu, Hannaway, & Taylor, 2009).

Teach for America (TFA) recruited recent graduates from the top colleges and universities across the United States. TFA corps members made a two-year commitment to teach children in disadvantaged rural and urban schools (Kopp, 2003). Teach for America promoted itself as “...building the movement to eliminate educational inequality by enlisting our nation’s most promising future leaders in the effort” (Teach for America, n.d.). TFA corps members were carefully selected through a screening process that included a written application (resume and 500-word letter of intent), a 30-45 minute phone interview, a final interview that consisted of a 5-minute teaching sample, and a written reflection on specific teaching articles (Teach for America, n.d.). Once candidates were notified of their acceptance, they are required to complete several preservice training opportunities to prepare them for their fall teaching placement.

TFA had a rigorous training schedule that must be completed before entering a classroom. After being accepted into the program and before the initial training institute, TFA corps members received an independent work assignment which was designed to cause the corps members to reflect on and think about the work ahead. Next, corps members attended a regional training institute where they learned about the region in which they would teach, the school district to which they had been assigned, and the required curriculum of their assigned school. After the regional training, corps members

attended a 5-week summer session where they had the opportunity to gain pedagogical knowledge and experience through six content foci: teaching opportunities, observation and feedback cycles, rehearsal sessions, lesson planning clinics, curriculum sessions, and reflection assignments.

Upon completion of the 5-week summer institute, corps members returned to their regions where they attend a regional orientation prior to beginning their full-time K-12 teaching position. All TFA training was structured around the six content foci, as seen in the summer session, during the two-year commitment. At the regional orientation, corps members took an in-depth look at their specific schools, communities, and curriculum. Once the school year was underway, TFA provided ongoing professional development, which included access to TFANet, a website of specific TFA teaching resources and idea exchange. Corps members were assigned to a regional program director who evaluated and coached the corps members in the classroom.

Many research studies have been conducted on the work of the TFA organization and have proven the success of the TFA strategies. In a study by Xu et al. (2009), results concluded that TFA secondary teachers are more effective, as measured by student exam performance from 2000-2006, than non-TFA secondary teachers in North Carolina. TFA secondary teachers were found to be more effective in all subject areas, especially in the areas of math and science. The researchers determined that TFA teachers had higher Praxis scores (content knowledge exams) in the areas of math and science and attributed the greater gains in student exam performance to their teachers' subject knowledge.

Other studies have made similar findings. The random assignment experimental study by Decker, Mayor, and Glazerman (2004) determined that the students of TFA

teachers (control group) made significant gains in mathematics and equivalent gains in reading compared to students of non-TFA teachers. The researchers in this study noted that many of the TFA teachers were not state certified and did not have formalized preservice training, so they recommended that policymakers consider TFA as a valid option for attracting teachers to schools in the poorest communities (Decker et al., 2004). A local example of this success is seen in the Roosevelt Elementary School District in Phoenix, Arizona.

As a district labeled *Underperforming* by ADE, several years ago, Roosevelt looked to TFA as a solution (Covington, 2010). One of the district's schools, Cesar Chavez Community School, was labeled as a *Failing* school in previous years but since 2010 has claimed a *Performing Plus* label (Covington, 2010). Cesar Chavez Community School not only has TFA teachers on staff, but its principal is also a TFA alumnus. The district attributed this achievement to the impact of TFA. The TFA program has been criticized for the fact that its corps members often leave the profession after their two-year commitment, leaving the school/district with a constant turnover of teachers. TFA teachers leave after the two-year commitment as the program was designed with the intention of bringing new college graduates to the most needy schools to give back to communities prior to moving on in careers such as law, medicine, and policy (Kopp, 2003). However, Roosevelt had found that of their original 27 TFA teachers, 20 have opted to stay past the two-year required commitment (Covington, 2010).

Critics of TFA also state the 5-week summer institute was not enough training to prepare these teachers to work in the most challenging schools (Covington, 2010; Xu et

al., 2009). Much of the criticism of TFA mirrors that of the alternative certificate programs despite TFA's reported success.

In 2005, a study conducted by Darling-Hammond, Holtzman, Gatlin and Heilig compared the effectiveness of fully certified teachers with TFA teachers. Prior studies by other researchers only compared TFA teachers to a comparison group of similarly experienced (i.e. beginning) teachers and found that TFA teachers had higher student achievement gains (Darling-Hammond et al., 2005). In contrast, the Darling-Hammond et al. (2005) study found on a consistent basis that certified teachers had higher student achievement gains than TFA teachers during their first year of teaching. Although the achievement scores of students in each group were matched by the second or third year of teaching, the study noted that nearly all TFA teachers leave the teaching profession by then (Darling-Hammond et al., 2005).

TFA corps members commit to a two-year program at the onset of their program. The majority of the corps members leave their initial teaching position (Berliner & Laczko-Kerr, 2002). Although members often abandon the classroom, as many as two-thirds continue in education employed in administration and policy type positions (Labaree, 2010). Prior to the end of the two-year commitment, TFA corps members in addition to other alternatively certified teachers, leave the classroom prior to the end of their contract period (Jorissen, 2003). In a 2003 study, Jorissen found after a review of the literature that alternate route teachers who were prepared in short-term programs have been found to leave their teaching position at higher rates compared to those prepared in extended programs that include intensive field experiences. Darling-Hammond drew the conclusion in her previous research that, "Studies have found that recruits from short-

term alternative certification programs tend to have difficulty with curriculum development, teaching methods, classroom management, and student motivation” (Darling-Hammond, 2001). In Jorissen’s 2003 study, the researcher came to the conclusion that:

The reflections and observations of six alternate route teachers who continued working in urban schools and plan to stay there provide evidence that preparation programs can be structured to promote the development of the level of competence and identity essential for a long-term commitment to a career in education. Such programs, however, require that participants experience a pattern of reinforcing successful experiences within a supportive professional learning environment.

This statement is essential in creating programs to support and retain alternative path teachers in the field.

In prior years, TFA corps members in Arizona taught with an intern certificate issued by ADE and must have been enrolled in a teacher preparation program. Corps members not only followed the training and structures provided by TFA but must have also completed requirements mandated by the teacher preparation program. Both of these elements existed to support the beginning teacher in their work in the K-12 classroom.

The TFA program contained elements similar to many of the other effective models discussed previously. The difference between TFA and the other programs was that the corps members were selected through a highly selective, systematic process that stemmed from Ivy League schools. The TFA program was unique in that TFA contracted with specific districts or charters in an agreement to place the Ivy League graduates at their schools. Unfortunately, many publicly funded districts or charters did not have the luxury of selecting intern teachers from Ivy League schools.

Summary of Induction Programs

All local and national induction programs reviewed in this study consisted of multiple components to support new teachers, not just one-to-one mentoring. To adequately support teachers in the classroom, a plethora of meaningful and purposeful components have been utilized. RT teachers were at a disadvantage when hired in districts/charters that did not offer a high-intensity model of induction support. A summary of each induction program identified in this study is summarized in Table 4.

Table 4

Chart of Common Induction Components

Component	TIP	BEST	BEGIN	NTC	TFA
Orientation Prior to Start	X		X		X
Time to Attend External Workshops	X				
Network of Teachers	X		X	X	X
PD Workshops	X	X	X	X	X
Teacher Evaluation	X	X	X	X	X
Program Evaluation	X			X	
Formal Mentoring	X	X	X	X	X
Multiyear Span of Time	X	X	X	X	X

Table 4 shows that while each of the reviewed local and national induction programs incorporate a few to nearly all of the research-proven effective components, only the TIP contains all eight major components. The least utilized component, “Time to Attend External Workshops” (attending professional development offered outside the district and TIP program), was only utilized in the TIP model. The second least utilized was “Program Evaluation” where program participants evaluated the induction model they participated in. The remaining six components can be adapted to an induction program that is based in an online environment. The remaining six common induction components informed the innovation that Black Water College deployed, as described in Chapter Three.

Theoretical Framework: Social Learning Theory and Communities of Practice

One theoretical framework on which this study is based is Bandura’s (1977b) social learning theory, which explained that people with a high level of self-efficacy (the belief that they can perform well) viewed difficult tasks as challenges to master and not as tasks to avoid. This theory rationalized that a teacher’s sense of self-efficacy impacts how the teacher approached the tasks, goals, and challenges of a K-12 classroom environment.

A second theoretical framework of this study comes from Etienne Wenger’s work, *Communities of Practice: Learning, Meaning, and Identity* (2008). Wenger’s work discouraged practices of working in isolation, a common practice amongst teacher preparation programs in developing future educators. Once these graduates go into the teaching force, they did not receive any support to help them bridge their theoretical knowledge to actual classroom practice. Wenger described this current attitude, which

reflects the belief that "...learning is an individual process, that it has a beginning and an end, that it is best separated from the rest of our activities, and that it is the result of teaching" (p. 3). Instead, Wenger viewed learning as a social activity, so that participation in a learning community identified not only what we do, but who we are and how we interpret what we do.

Social learning theory, as applied to the concept of communities of practice, included meaning (talking about our experiences and abilities), practice (shared views of action), community (the action of talking and participating), and identity (discussion of how learning changes, Wenger, 2008). The learner reflected on new learning and analyzed how it might impact future actions (Wenger, 2008). As seen through a social learning theory lens, communities of practice have been utilized within an induction program to encourage teaching candidates to reflect on their learning. For candidates in alternative path programs, the new learning concerned teaching strategies and the implementation in the classroom. The 2002 work of Wenger et al. defined communities of practice as a "...group of people who share a common set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (p. 4). Intern teachers needed this type of communicative interaction, as they often work in isolation, face challenging situations, and did not always have peers in similar situations at their schools to help them problem solve. A community of practice then became a "...vehicle for the evolution of practices and the inclusion of newcomers while also the vehicle for the development and transformation of identities" (Wenger et al., 2002, p. 13)

Moir's (2009) work in the teacher induction framework incorporated practices that folded into the framework of communities of practice. In a review of the literature on induction programs, Moir (2009) found that communities of practice played an important role in the success of beginning teachers. The use of communities of practice brought together new and experienced teachers formed by grade level or content area. Teachers in these communities participated in activities such as the design of lesson plans, peer observations, and analysis of student data. To assist in the development of communities of practice, the NTC learned that online can be a timely and cost-effective means for building such a community (New Teacher Center, 2007). NTC's online communities were supplemental to their in-person meetings and professional development trainings. This technology allowed new teachers to post questions and concerns in discussion groups so that mentors and peers could respond at their convenience.

The literature reviewed in this chapter has discussed how communities of practice can help transition beginning teachers who have completed a teacher preparation program. However, Black Water College's RT program brings a unique perspective to the use of these communities that is missing in the literature. The unique perspective is the nature of the RT program where intern teachers are completing their teacher preparation coursework while simultaneously teaching in the K-12 classroom. Research on the impact of communities of practice for new teachers in general has found that districts/charters that are known for their effective instruction, administrative support, and peer/mentor support systems allow opportunities for beginning teachers to improve their

teaching practice and provide them with a sense of belonging (Saka, Southerland & Brooks, 2009).

In a qualitative study of beginning teachers' transformations, Saka, Southerland and Brooks (2009) compared a teacher involved in a community of practice with one who was not. The findings showed that the teacher who was employed in a setting known for effective instructional practices, administrative support, and a collaborative community of practice had a greater sense of success, competency, and recognition. The other beginning teacher, who was employed in an environment without such elements, did not feel as if she belonged within the school community and had limited opportunities to internalize activities and reform practices.

Distance Learning and Communities of Practice

A recent study based on a survey of 24 instructors teaching college courses online concluded that online learning was becoming an effective modality for instruction (Gahungo et al., 2006). Yet, the researchers concluded that online courses encouraged the tradition of individualism through communication that was primarily through single-recipient emails, either between faculty and students or student to student (Gahungo et al., 2006). In the past, intern teachers attending Black Water College have voiced through email and conversations with their cadre leader that they wanted to connect with other intern teachers who either taught the same course or content area. This need fell directly in line with Wenger's thoughts on "...learning [as] an issue of refining their practice" (Wenger, 2008).

Technology provided for innovative ways to cultivate communities of practice, especially when facing challenges of location, time, and space. Wenger (2008) states,

“Engagement, imagination, and alignment each create relations of belonging that expand identity through space and time in different ways” (p. 181). Lai, Pratt, Anderson and Stiger (2006) revealed four findings in relation to virtual communities of practice:

- They go beyond traditional "one time only" and "face-to-face" models of professional development.
- They allowed teachers to engage co-productively in the creation of new knowledge, allowing teachers to take a greater personal role in their professional growth.
- They shifted the traditional teacher training from a hierarchical model to a practice of learning from and with a community of educators.

Each of the local and national induction programs discussed in this chapter contained components that lent themselves to the creation or enhancement of a community of practice through a distance learning format. The components of an effective induction program, as seen in Table 5, did not all encourage a community of practice strategy. After a review of the literature on virtual communities of practice, I identified that six of the most common components of the national and local induction programs can be conducted in a virtual community of practice. Table 5 displays the components of an induction program that directly encouraged communities of practice, an important consideration to encourage teacher effectiveness.

Table 5

Components of Induction Programs that include Community of Practice Strategies

Component	TIP	BEST	BEGIN	NTC	TFA
Orientation	X		X		X
Network of Teachers	X		X	X	X
PD Workshops	X	X	X	X	X
Teacher Evaluation	X	X	X	X	X
Formal Mentoring	X	X	X	X	X
Multi-Year Induction	X	X	X		X

After a review of the literature regarding virtual communities of practice, six of the eight identified components of an effective, high intensity induction program, lent themselves to be conducted in a virtual method based on my experiences with online learning tools. In a study by Beesley, Atwill, Blair and Barley (2008), the researchers found that beginning teachers in rural areas were often mentored by teachers who did not teach the same grade level or content area; other research has shown the importance of finding such a match, and using virtual technology allows such collaboration to happen.

Conclusion

Alternative certification programs place intern teachers in otherwise vacant positions demonstrating a clear need for supporting these teachers with the most effective induction methods possible. In my review of literature, I found evidence that teacher induction programs have a long, successful history of helping beginning teachers during

their first years in the classroom. Unfortunately, not all districts/charters have the funding, expertise, and systemic need to support a multicomponent and multiyear program induction program. Black Water College has committed to the creation of an induction program for all of its RT intern teachers. This study explores the impact of an induction experience for new intern teachers (based on local and national induction models and the opportunity for collaborating within a community of practice) during their first semester. The literature review in this study suggested that a comprehensive approach to alternative certification based on promising common practices of the reviewed programs provided an effective approach to new teacher preparation and support during the critical first semester.

The Innovation

In the summer of 2011, Black Water College began an institution-based induction program for RT teachers across the state of Arizona. The i²Teach Program (Induction + Intern + Teach) was designed based on the promising practices of well-known induction programs backed by research (NTC, TIP, BEGIN, BEST, TFA/ATF), Bandura's social learning theory, and Etienne Wenger's theory of communities of practice. The study covered a 15-week period from September to December at the initial start of a 2-year program. The i²Teach Program consists of six components:

1. Orientation Sessions: In groups of 10 interns and one Cadre Leader, each intern participated in a series of eight Elluminate sessions during a 2-week period. Sessions were 60 minutes in length, Monday through Thursday of each week. The start time was determined by the group. Topics of the

Illuminate sessions were pertinent startup topics for both the K-12 classroom and the college online learning environment.

2. Professional Development: After the initial eight orientation sessions, professional development sessions continued in the same format for weeks three through fifteen. The sessions were conducted once a week for approximately 60 minutes per session. The days and times of the sessions were determined by the group. Required extension activities included discussion board prompts and observations as explained below.
3. Forums: After each weekly professional development session, students were directed to the online forum for further resources and conversations.
4. Observations: Each intern checked out a Flip camera from Black Water College's library for use in the observation process. All interns had two formal evaluations of their teaching performance completed by the Cadre Leader using the Student Teaching Assessment Instrument (STAI); one evaluation occurred during Weeks 1-2, and a final observation took place during Weeks 12-15. Interns within Madison County had in-person observations, while those teaching outside of Madison County were conducted by video. During Weeks 3-14, interns were required to record specific events in their classroom. This video footage was then uploaded to a video annotation site, where the Cadre Leader and fellow peers were able to post feedback (annotation).
5. Blog Reflections: After each weekly professional development session, interns were required to write to a self-reflection prompt related to the week's

topic in the blog section of their Epsilen (learning management system being used) account.

6. Spotlight in Education: A guest speaker held a 60-minute Elluminate webinar on an educational topic during Week 15 of the study. Following the Spotlight session, interns received extension assignments related to the webinar through the discussion boards, professional development sessions, and reflections.

Table 6 shows the induction components in a chart form. For additional detail, see Appendix D.

Table 6

Highlights of Innovation Activities

Week	Activity	Topic(s)
1 Formal Evaluation during weeks 1-3		
1	4 Webinars	Structure of induction, Program Plans, Who to Contact, Navigating Black WaterLearn, Flip Cams, Communication
2	4 Webinars, Self-Efficacy Survey	Lesson Planning, Special Education, IEPs, 504s, Accommodations, Review of Sessions to date.
3	1 Webinar, Blog, Flip, Discussion Board	Student Engagement
4	1 Webinar, Blog, Flip, Discussion Board	Instructional Strategies
5	1 Webinar, Blog, Flip, Discussion Board	Parent-Teacher Conferences, Communication, and Volunteering
6	1 Webinar, Blog, Flip, Discussion Board	Assessment
7	1 Webinar, Blog, Flip, Discussion Board	Classroom Management
8	1 Webinar, Blog, Flip, Discussion Board	Reading Instructional Strategies and Common Core
9	1 Webinar, Blog, Flip, Discussion Board	Integrating Technology to Support Student Learning
10	1 Webinar, Blog, Flip, Discussion Board	Working with ELD students
11	1 Webinar, Blog, Flip, Discussion Board	Special Education
12	Thanksgiving Week	
13	1 Webinar, Blog, Flip, Discussion Board	Differentiating Instruction
1 Formal Evaluation during weeks 12-16		
14	1 Webinar, Blog, Flip, Discussion Board	Curriculum Mapping
15	Spotlight Session	Learning and the Brain

The design of this innovation, as described in Table 6 and Appendix D, was informed by the literature regarding the history of alternative certification, the discussion of the benefits and resistance against alternative certification, and the existing models of induction programs. The components of induction program were designed based on various local and national induction model best practices. In Chapter 3, I will discuss the methodology approach and design of this research study revolving around the activities within the induction program implementation.

Chapter 3

Methodological Approach and Design

Within this action research study, I utilized a mixed-methods design to investigate the impact of a multicomponent distance induction program on first-year alternatively certified rural and urban teachers in Southwestern United States. I employed a mixed-methods design using quantitative and qualitative measures to allow myself as the researcher to recognize both types of data in the research process (Onwuegbuzie & Johnson, 2004). Stringer (2007) describes action research as "...a systematic approach to investigation that enables people to find effective solutions to problems they confront in their everyday lives..." (p. 1). As an educational practitioner, the mixed-methods design method was essential to solving the day-to-day problems within the workplace. The methodologies which were used were both general and specific in nature informing the research questions in different ways that a one method design could not do alone (Greene, 2008).

The study was conducted through a pragmatic paradigm approach to mixed-methods. According to Onwuegbuzie and Johnson (2004), the basic use of pragmatism is to "choose the combination or mixture of methods and procedures that work best for answering your research questions" (p. 17). As a researcher, a pragmatic approach allowed me to use the research methods and data analysis techniques that best informed my research questions. According to Jennifer Greene (2007), a pragmatic mixed-methods design accepts "...both realist and constructivist strands of knowledge..." (p. 84). Furthermore, a pragmatic approach explicitly made the philosophical assumptions

that underlined my methods decisions focused on the transactions and interactions within the study (Greene, 2007).

The study investigated the extent to which a multicomponent distance learning induction program impacted first-year intern teachers' sense of self-efficacy in the areas of student engagement, instructional practice, and classroom management (Research Question 1). Additionally, the study explored the intern teachers' views regarding the ways they felt supported in a distance learning induction program (Research Question 2) and the areas in which they felt they were struggling (Research Question 3). The study also explored how cadre leaders' evaluations of intern teachers using the Student Teaching Assessment Instrument (STAI) in the areas of student engagement, instructional practices, and classroom management changed from the September/October (pre) observation to the November/December (post) observation as well as the findings of the cadre leader in regards to the intern teachers' performance (Research Question 4).

The research questions in this study employed a mixed-methods approach using quantitative and qualitative measures. This design allowed for complementarity of data from multiple sources to confirm or disconfirm answers to the research questions. Jennifer Greene (2007) states that the use of complementarity in a mixed-methods design will allow for a "...broader, deeper, and more comprehensive social understanding by using methods that tap into different facets..." (p. 101). I analyzed the results from the different data sources to "...elaborate, enhance, deepen, and broaden the overall interpretations and inferences from the study" (Greene, 2007, p. 101).

Description of the i²Teach Induction Program Innovation

The i²Teach Induction Program was an innovative approach to preparing new teachers who did not have prior teacher education course work. The innovation consisted of two parts: cadre leader training and the preparation of new teachers by cadre leaders. The i²Teach Induction Program occurred during the Fall 2011 academic term (August – December, 2011).

Setting. The action research study took place in both in-person and virtual environments through the participants' enrollment in a suburban campus of the largest community college system in the Southwestern United States. Black Water College, is one of 10 colleges in the system serving approximately 60,000 students annually, primarily undergraduate students in an online setting. Specifically, the subset population of this study were required to possess a conferred baccalaureate degree, unlike the typical student profile, as demonstrated through official university transcripts, and possess an intern certificate through the state department of education.

The intern teachers were employed by 58 districts and 16 charter schools within Arizona. Eighty-five interns were located within Madison County while another 61 interns were located out of Madison County. The in-person training components for the cadre leaders of the induction program took place at Black Water College. Classroom teaching observations of the intern teachers were conducted in-person by the cadre leaders during weeks four through six and a second observation during weeks 12 through 15 of the study for those intern teachers employed within Madison County. Since it is prohibited for one county's community college to offer in-person courses in another county, intern teachers employed outside of Madison County video recorded their

teaching observations and upload to Wistia, a video annotation site, for evaluation. All other components of the i²Teach program were conducted through virtual tools such as Elluminate, Skype, phone conferences, Epsilen, and Black WaterLearn. Definitions for these can be found in Appendix C.

Participants and sampling. The intern teacher participants were selected based upon their initial enrollment in the Resident Teacher (RT) program between June 1st and September 15th, 2011. Students enrolled in the RT program were required to be employed full time with an Arizona district/charter school. Participation in the induction program was a mandatory requirement of the RT program.

This study focused on all new interns in the RT program and the cadre leaders hired to carry out the induction components. One hundred forty-six new intern teachers enrolled in the RT program from June 1st through September 15th, 2011. Of the 146 new interns, 20 interns withdrew (13.6%) from the program during various times through December 2011. With 126 participants remaining, three of these participants were noncompliant meaning after completion of the enrollment process, the participants did not complete any of the program requirements. The three noncompliant interns were all in the area of early childhood and taught kindergarten. Of those 123 participants left, 75 interns agreed to have all or part of their induction component work--blogs, student teaching assessment instrument (STAI) numerical data (pre/post), self-efficacy survey (pre/post), video annotations, and STAI narrative responses (pre/post)--analyzed to inform the study. Three interns opted out of the study completely. The other 45 interns did not return signed study permission slips after three emails, one mailed via the USPS,

and one cadre leader email attempt. Research data from a total of 60.98% of the total possible participant pool was utilized in this study.

In an attempt to understand the high percentage (39.02%) of the possible participant pool not returning study permission slips, interns were contacted asking for their input to help explain this behavior. Obtaining permission from the interns after the first email attempt started out from the beginning producing few study permissions returned. This led to trying to obtain permission through a second and even third attempt by email, requesting interns to sign the permission then both scan and return by email, U.S. mail, or fax. Interns were also encouraged through their cadre leaders to return the permission. Given that these attempts produced few results, 98 interns were sent a cover letter, self-addressed stamped envelope, and permission slip in the U.S. mail to their home addresses. In this attempt, interns were notified that a drawing for two 25 dollar gift certificates that would be drawn from those slips returned by a specific date. After the multiple and varied attempts to obtain permission, there still was the 39.02% of the interns who did not respond. Four students were contacted through their Black WaterLearn email asking for their insight:

I have honestly not done it due the fact that the idea of doing even one more item of paperwork makes me want to run screaming to the hills to cry...my school has involved me with from John-Hopkins Co-teaching trainings, to transition planning classes, district planning committees, tutoring, all on top of our Rio, our 25 student case load of IEPS to write, and 3 different subjects to plan for however the list must end here because I need to continue with other work this evening. I just did not make the time to do it. It was not an immediate necessity on my list of things to do in order to survive each day...the requests that fly my way daily for little things here or there have to often be pushed off for more immediate needs.

This evidence suggests that intern teachers are extremely pressed for time their first semester and have to prioritize what items are accomplished and others that are passed

over for the sheer sake of not enough time to do everything. This lack of time and being stretched thin helps to explain such a high percentage rate (39.02%) of the interns being non-responsive to the multiple requests.

A total of 19 cadre leaders were hired to conduct the induction program components. All 19 cadre leaders (100% participation) gave consent to use data from video annotations, focus group sessions, STAI numerical scores, and narratives.

Demographics, educational background, years of teaching experience, and prior certifications held. Demographic information was recorded on each intern teacher for the purpose of federal Title II reporting conducted each year. All intern teachers possess at a minimum, a bachelor's degree (100%). Of the 75 study participants, 55 (73.33%) were female and 20 (26.67%) were male. Eight interns held a master's degree (10.67%), and 0 participants held a doctorate degree (0%). The age of intern teachers in this study ranged from 22 to 58 years old, with a median age of 41.5 years old. The ethnicity of the study participants was self-reported consisting of 62 (82.67%) Caucasian, 6 (8%) Hispanic, 4 (5.33%) African American, and 3 (4%) Asian American. Study participants were asked to disclose their years of teaching experience. Of the 75 study participants, 31 (41.33%) interns had taught less than a year, 21 (28 %) had taught a year, 9 (12 %) had taught two years, and 14 (18.67%) had taught three years or more. Not all study participants were seeking their first teaching certification as factors such as position availability, salary advancement, credit hours for recertification, and personal growth contributed to obtaining multiple certifications. Twenty-three held existing teaching certificates (16 substitute, 4 elementary, 1 secondary, 1 career technical education) in addition to the intern certificate. Certificates in the areas of elementary, secondary, and

career technical education are viable for full time employment while substitute certificates are only useable for up to 120 out of 180 days a year and do not lead to permanent employment with benefits. Fifty-two were obtaining their initial teaching certificate.

Cadre leaders were another important participant group within the study. Nineteen cadre leaders were hired by Black Water College through an application process that required a resume of teaching and mentoring experiences, two letters of recommendation from a colleague or supervisor who has seen the applicant work in a mentoring situation, and evidence of strong technology skills as demonstrated through self-disclosure in a narrative response. The college sought cadre leader candidates who were responsible for the training of intern teachers during the induction process; duties included activities such as facilitation of collaborative discussions, reflection on successes and failures, overall support, and evaluation of the intern teachers in their role in the K-12 classroom through distance learning methods heavily reliant upon technological resources. These technological resources used to facilitate discussions of teaching practices in a mentoring relationship included email communication through the Black Water College learning management system, video annotation tool, use of digital video cameras, and web conferencing software. The cadre leaders were responsible for the facilitation of the multicomponents of the induction program including conducting the webinar sessions, annotating teaching video segments, commenting on intern blogs, and conducting two classroom observations with pre/post observation conferencing.

Cadre leaders were not considered permanent employees of the college although their mentoring responsibilities were pivotal to the success of the induction process. The

cadre leaders were contracted on a per semester basis (16 weeks), paid by the student at \$325 per student. This contract amount was based on \$26 dollars per hour for a total of 12.5 hours or 45 minutes per student, per week for 16 weeks. Cadre groups ranged from one student to eleven students with an average group size of 6.68 students (\$2,171 average cadre leader payment). Cadre leaders did not qualify for benefits such as vacation/sick time, retirement, or health insurance.

Given the unique situations and prior experiences of each intern, some interns required more time of their cadre leaders than others making it difficult to determine a set number of hours worked each week by the cadre leader. At a minimum, cadre leaders met with their intern groups for one hour each week over the 16 weeks. The first few weeks of the semester required additional time for items such as establishing meeting times, troubleshooting technology issues, and conducting the initial webinars (four one-hour webinars each week for the first two-weeks). During the weeks in which observations and pre/post conferences were being conducted, cadre leaders saw an increase of hours worked.

The flexibility of the hours worked made it possible for the cadre leaders to work in other positions in and outside of Black Water College. Of the 19 cadre leaders, six were employed with Black Water College in another capacity, but not full time. Thirteen (including the six employed with Black Water College in other capacities) of the cadre leaders were also adjunct faculty members teaching online classes in the teacher education program. One cadre leader was a full time principal for a local school district, while others taught in an adjunct role for other colleges. Two of the cadre leaders were stay-at-home-mothers and five were retired educators.

Within the study, I took on the role as a coordinator, facilitator, and researcher. As a facilitator, my responsibilities included (a) blind screening and recruitment of cadre leaders, (b) collaboration with developers in creation of induction program content, (c) assignment of cadre leaders to intern teachers, and (d) oversight of overall induction program implementation. In addition, as a researcher, my role was to observe the process, collect and analyze the data, and report findings and implications.

Action plan. A strategic action plan was utilized on a timeline in order to successfully implement the i²Teach multicomponent induction program. There were pre-induction activities that I needed to consider including hiring cadre leaders, writing workshops, training cadre leaders, and assigning intern groups to cadre leaders. These activities took place from June through August prior to the start of the i²Teach program. Consideration for additional items such as the timing of the induction components and implementation of data measures was also needed in the planning for implementation of this action plan. This information can be found in Appendix D.

Intern teachers received credit for EDU287AA Master Teacher Seminar I (1 credit hour) and EDU287AC Master Teacher Seminar III (1 credit hour) for completion of a minimum of eighty percent of the i²Teach induction components--blogs, forum postings, webinar attendance, and video annotations. Intern teachers also received a pass/fail grade in their student teaching course (2 credit hours) for completion of two classroom teaching observation evaluations, written lesson plans, and pre/post conferences.

Data Collection Procedures

Both quantitative and qualitative data sources were used within this study. The measures are listed below and categorized as quantitative or qualitative measures. The construction or origin of the instrument, collection method, validity, and the response rate of the tool is described below. Chapter 4 describes the purpose, description of the data analysis, and the results.

Quantitative measure 1: Self-efficacy survey - The instrument

construction/origin. The Teachers' Sense of Self-Efficacy Survey was created by Megan Tschannen-Moran, College of William and Mary and Anita Woolfolk Hoy, Ohio State University (Tschannen-Moran & Woolfolk Hoy, 2001). Instructors teaching pre-service teacher education courses were asked by the tool's designers to identify what students should be able to do after completing a teacher education program. A list of thirty-two teaching skills ranging from managing classrooms and evaluating student work to using cooperative learning approaches were identified. Given the list of skills, a rating scale was then created (Tschannen-Moran & Woolfolk Hoy, 2001).

The Teachers' Sense of Self-Efficacy Survey (Tschannen-Moran & Woolfolk Hoy, 2001) is an acknowledged and reputable 24-question closed-ended survey consisting of a 9-point Likert-type scale providing quantitative data. This survey instrument was only modified by aligning the most desirable responses to the left side of the sheet (Tourangeau, Rips, & Rasinski, 2000, see Appendix E). The intent of the pre/post survey was to identify to what extent, if any, an induction program impacts intern teachers' sense of self-efficacy. The survey included questions such as, "How much can you do to control disruptive behavior in the classroom?" and "How much can

you do to motivate students who show low interest in school work?” The following demographic information was asked on the pre and post survey: gender, racial or ethnic identity, years of teaching experience, age, highest degree completed, and teaching certificates held.

Collection method. The Teachers’ Sense of Self-Efficacy Survey (TSOSES) was a pre/post data source. The initial survey was disseminated to all intern teachers at Black Water College through a link in an email sent to personal and college email addresses. The survey was constructed using SurveyMonkey, an online survey tool. A total of 75 participants were sent the email with the link to the TSOSES pre-survey to their personal and Black Water College email accounts in September 2011. The survey remained open for 3 weeks. The post survey, with the same questions as the initial survey, was disseminated in Week 16 of the induction program to all interns at Black Water College remaining open until the end of January, 2013.

Reliability and validity. Tschannen-Moran and Woolfolk Hoy (2001) conclude that previous attempts to measure teachers’ efficacy through external means rather than reflective means have had questionable validity and reliability issues. After examining various instruments measuring teacher efficacy, Tschannen-Moran and Woolfolk Hoy (2001) developed the Teachers’ Sense of Self-Efficacy Survey. Upon development, the questions were examined in three different studies to identify the validity and reliability of the instrument. After each study, the researchers refined the instrument. In the final study, the instrument was determined to be valid through a process of correlating the constructs against existing instruments. The constructs were positively related to the instruments by Rand as well as Gibson and Dembo. The reliability measurements of the

instrument constructs were .87 for student engagement, .91 for instruction, .90 for management. A high Cronbach's alpha is important to demonstrate the internal consistency or reliability of the instrument. An internal consistency scale of above .9 is deemed as "Excellent" while .8 - .89 is "Good", .7 - .79 is "Acceptable", .6 - .69 is "Questionable", .5 - .59 is "Poor", and .49 and less is "Unacceptable" (Cronbach, 1951). The instrument was therefore determined to be reliable and valid.

During the Spring 2011 semester, I piloted the Teachers' Sense of Self-Efficacy Survey (N=5) and computed a Cronbach's alpha test of reliability for each of the three constructs. Using the SPSS system, computerized statistical analysis software, a Cronbach alpha test was performed on each construct to determine if the survey proved to be reliable. The Cronbach's alpha for each of the three constructs ranged from .816 to .883 which are acceptable (Nunnally, 1978).

Table 7

Pilot Results for Internal Reliability for Constructs and Instrument

Construct	N	Internal Reliability (Cronbach's Alpha)
Student Engagement	8	.851
Instructional Strategies	8	.883
Classroom Management	8	.816
Overall	24	.930

Table 6 displays the three constructs within this survey: student engagement, instructional strategies, and classroom management. All three constructs demonstrate

consistent high reliability scores (greater than .8). Due to the high reliability of each of the constructs, the instrument does prove to be statistically reliable, with an overall reliability score of .930 for the entire survey.

Response rate. A total of 146 participants were sent an email with the link to the TSOSSES pre-survey to their personal and Black Water College email accounts in September 2011. The survey remained open for 3 weeks. The first request to new teachers to complete the survey via their Black Water College email yielded few responses within the first week. The second and third requests sent via email to both the Black Water College and personal email resulted in a few more. Cadre leaders overseeing the study participants also encouraged (via email and webinar) the new teachers to complete the surveys. The post survey, with the same questions as the initial survey, was disseminated in Week 16 of the induction program. Of the 146 possible study participants, 20 students had withdrawn from the program and three were unable to be reached. Therefore, 123 interns at Black Water College were sent a link with the post survey. As with the pre-survey, the first request to complete the survey via their Black Water College and personal email yielded few responses within the first week. The second and third requests sent via email to both the Black Water College and personal email resulted in a few more. Cadre leaders overseeing the study participants also encouraged participation via email and webinar. The post survey remained open until the end of January, 2013. Only those surveys that had a matching pre and post survey were utilized in this research. Missing surveys or those which permission to use was not granted were removed from the spreadsheet. In the end, a total of 29 out of 75 useable survey responses were received (38.67%).

Quantitative measure 2: Student Teaching Assessment Instrument (STAI)

numerical scores - The instrument construction/origin. The STAI is a student teaching classroom evaluation assessment instrument which has been utilized for over five years by Black Water College to evaluate the effectiveness of student teachers in various stages of student teaching. The use of the STAI numerical scores evaluates a student teacher's performance in the classroom. The STAI narrative responses completed by the cadre leader are discussed as the Qualitative Measure 3. The instrument was created by a Black Water College team consisting of the Faculty Chair of Education, adjunct instructors, college supervisors, and a former Dean of Education at another institute of higher learning. The instrument was field tested and revised based on the analysis of data from previous findings to form the final instrument.

Collection method. The STAI was utilized twice during the study as a pre and post assessment measure. Interns within the county where the college is located had in-person observations conducted by a cadre leader, while those outside of the county had classroom teaching time video recorded then uploaded to Wistia (an online video annotation site). All interns had a formal evaluation, utilizing the STAI, of their teaching performance completed by the cadre leader once during weeks four through six and a second evaluation during weeks 12 through 16 of the study. The STAI consists of three main sections: (a) Planning and Preparation for Learning Centered Instruction, (b) Instruction, Reflection, Monitoring and Adjusting, and (c) Classroom Management. Within each section are three to four subsections, each consisting of up to eight indicators, for a total of 41 indicators. Each indicator was scored on a 5-point scale.

Reliability and validity. The STAI is an evaluation tool that was created by a team of educators at Black Water College after reviewing similar instruments used by various colleges of education. The instrument was piloted with a small group of student teachers, and informal feedback was gathered from the evaluators using the tool. For the first few years, the instrument was continually revised based on evaluator feedback. Prior to this study, the instrument had not been statistically tested for reliability and validity. For the purposes of this study, the STAI was modified from the existing form by defining the criteria for a score of a 5, 3, and 1. My instructional team, five members representing each of the certification areas (special education, elementary, secondary, arts, and early childhood), determined the identification of criteria needed to be observed for specific scores in a rubric format. See Appendix G for a copy of the instrument. In the summer of 2011, an evaluator training was held for the cadre leaders to conduct an interrater reliability activity utilizing a video evaluation and the scoring rubric.

Interrater reliability can be defined as the scale of measurement of the same observable fact by different cadre leaders that produced the same or consistent results across different cadre leaders. The intent is that scores of different cadre leaders using the same measure on a single occasion are within a percent agreement. The consensus estimate method (Stemler, 2004) is a commonly used method for computing a consensus estimate of interrater reliability since it is easy to calculate and understand.

Although Black Water College's Instructional Team created a rating rubric that listed specific traits and behaviors that define good teaching practices evaluated by the STAI, the cadre leader's interpretation of the rubric was the basis for determining the score assigned. Cadre leaders exercised their judgment in their decision regarding how

well the intern teacher demonstrated each component on the rubric. The use of the rubric and interrater reliability training was to reduce bias in scoring by the cadre leaders due to judgments that may have been made to maintaining good relationships with the intern teacher or college staff, motivating the intern teacher to improve, or showing support for inadequacies (Murphy, Cleveland, Skattebo, & Kinney, 2004).

In the summer of 2011, as a part of the cadre leader training, an interrater reliability session was conducted to improve the chances of reliable implementation of the STAI. Prior to the training, the Instructional Team scored two predetermined video evaluations and then compared their scores to determine a set rating for each. The cadre leaders were asked to view the first video evaluation and scored the evaluation using the provided rubric. While viewing the video evaluation and scoring, cadre leaders were instructed not to discuss their scores with anyone. Cadre leaders were instructed to base their scores only on what was seen in the evaluation. Scores were inputted into a Google form by each of the cadre leaders. These scores were then compared to the set scores determined by the Instructional Team. Results were shared with the cadre leaders at the in-person training and included a discussion of the exercise. Acceptable scores by the cadre leader were those that were plus or minus one of the predetermined benchmarked scores set by the Instructional Team. A 64.39% agreement was achieved on this first round. According to Stemler (2004) and Hartmann (1977), a 64% agreement is considered a less than acceptable level of agreement.

Cadre leaders then completed a second evaluation at the in-person training and reported their scores into the Google form. Scores were then analyzed again for interrater reliability consisting of a plus or minus one of the predetermined benchmarked scores

with the hopes of the cadre leaders being more closely aligned in their scoring. A 86.34% agreement was achieved on this second round accomplishing a more closely aligned pool of cadre leaders. According to Stemler (2004) and Hartmann (1977), an 86% agreement is considered in the acceptable level of agreement (75% to 90%).

Response rate. The cadre leaders conducted in-person evaluations within Madison County and via video recording uploaded to a secure website for those who were teaching in schools outside of Madison County. Of the 75 study participants, 64 participated in the pre-observations in September/October 2011 and the post-observation in November/December 2011 for an 85% response rate. The quantitative data from all participants who gave permission to use their data was used in the data analysis. Nine study participants' STAI data was not used due to the information either not collected or collected outside of the study time frame due to illness or slow response to the cadre leader's request for a video of classroom instruction.

Qualitative measure 1: Video annotations – construction/origins. The teacher preparation program required participants to comment on video recorded teaching segments. Wistia is an online (<http://www.wistia.com>) website for video hosting which allows subscribers the opportunity to annotate video. The website timestamps the video aligned to the viewers comments. Groups of subscribers can be grouped together to view different video “projects” allowing multiple people viewing the same video and the comments left by other subscribers.

Collection method. During Weeks 3 through 15, all interns (in-county and out-of-county) were required to use a video annotation system to provide comments on video segments submitted by other peers within their cadre group. The annotated comments

served as qualitative data to assist in addressing the second and third research questions: In what ways do intern teachers feel supported in a distance learning induction program (Research Question 2)? What areas do intern teachers describe as the areas in which they struggle (Research Question 3)?

Response rate. All intern teachers in the i²Teach program were required to upload a 3 to 5 minute video each week to a video annotation website (Wistia) and comment on other interns' videos during Weeks 3 through 15 of the study to earn credit for EDU287AA Master Teacher Seminar. A total of 829 useable annotation responses from interns and cadre leaders were analyzed. Seventy students submitted 13 videos each in topic areas such as strategies for assessment, engaging students in the classroom, and structured English immersion, etc. A full list of topics is located in Appendix D.

Qualitative measure 2: Blog prompt - construction/origins. Students wrote a reflective entry in their online blogs weekly on a topic for professional development such as "meeting the needs of special needs students". A full list of topics is located in Appendix D. The blog prompts assisted in qualitatively answering the second and third research questions: In what ways do intern teachers feel supported in a distance learning induction program (Research Question 2)? How do intern teachers struggle in their first year of teaching (Research Question 3)?

Collection method. In Week 3 through Week 15, interns were required to write a blog posting reflecting on the focus of the week and on their application in the classroom, providing qualitative data for this study. The blog prompts were aligned to the specific week's professional development topic.

The initial blog responses were recorded within the Epsilen website blog area while the final blog response was recorded in a Google form. The purpose for recording the final response in a Google form instead of using the Epsilen tool was due to specific questions regarding the role of the cadre leader being asked. Posting the 13th blog to a Google form kept the responses regarding the cadre leader information private to only myself, the researcher, in hopes that interns would share honestly about the role of the cadre leader.

Response rate. Seventy-four study participants gave permission for their blog entries to be analyzed. One study participant did not give permission to analyze his/her blog. Study participants were required to complete eighty percent of induction program activities (blogs, Project Flips, forums, webinars) to earn two credit hours from Black Water College. Given the requirements, 74 study participants completed one to thirteen blog entries. Regardless of the number of entries, 74 student blogs were analyzed for the purposes of answering the study questions for a 100% participation rate.

Qualitative measure 3: Student Teaching Assessment Instrument (STAI) narrative .

Collection method. The STAI qualitative measures were collected as described in Quantitative Measure 2 described earlier. All interns had a formal evaluation, utilizing the STAI, of their teaching performance completed by the cadre leader once during weeks four through six and a second evaluation during weeks 12 through 16 of the study. The STAI consists of three main sections: (a) Planning and Preparation for Learning Centered Instruction, (b) Instruction, Reflection, Monitoring, and Adjusting, and (c) Classroom Management. Within each section are three to four subsections, each

consisting of up to eight indicators, for a total of 41 indicators. Each indicator was scored on a 5-point scale (Quantitative Measure 2) and a comment area for a narrative response was included (Qualitative Measure 3). See Appendix G for a copy of the instrument.

Response rate. As described earlier in the Quantitative Measure 2 section, this instrument had a response rate of 85%.

Data Analysis

Upon capturing data using the above mentioned instruments, I used both quantitative and qualitative data analysis techniques to investigate the extent to which a multicomponent distance learning induction program impacted first-year intern teachers' sense of self-efficacy regarding student engagement, instructional practices, and classroom management (Research Question 1), the intern teachers' views regarding the ways they felt supported in a distance learning induction program (Research Question 2), how intern teachers struggle in their first year of teaching (Research Question 3), and how cadre leaders' evaluations of intern teachers using the Student Teaching Assessment Instrument (STAI) in the areas of student engagement, instructional practices, and classroom management changed from the September/October observation to the November/December observation as well as the sub-question of the findings of the cadre leader in regards to the intern teachers' performance (Research Question 4).

The data collected in this study was analyzed in a complimentary method. This method of analysis extended and added to the overall conclusions (Greene, 2007). A complementarity table is located in Appendix K.

Quantitative data. I analyzed the quantitative data collected from the pre and post instruments of the Teachers' Sense of Self-Efficacy survey and the STAI evaluations

by uploading data from Excel spreadsheets, as described earlier, into a statistical software package, SPSS. I conducted analyses to help determine if the i²Teach program positively impacts the levels of self-efficacy and the interns' evaluation ratings through this intervention.

Quantitative measure 1: Self-efficacy survey. The repeated measures analysis of variance, paired sample t-test, was run on each construct for the Teachers' Sense of Self-Efficacy survey (Quantitative Measure 1). A paired sample *t*-test was selected for this data measure as Research Question 1 did not ask for effects over time or within a specific sub-group such as gender. Research Question 1 only asked for the extent of impact of a multicomponent induction program. An N of 29 was used for the Teachers' Sense of Self-Efficacy Survey (Quantitative Measure 1).

Quantitative measure 2: Student Teaching Assessment Instrument (STAI)
numerical scores. An equivalent repeated measures analysis of variance, (ANOVA) was run on each construct for the STAI numerical scores (Quantitative Measure 2) as Research Question 4 specifically called for change over time requiring the reporting of effect size. Given that the STAI has not been tested for reliability or validity, the use of interrater reliability activities was important. The STAI also consisted of 41 items which were not originally set up in the constructs of classroom management, instructional practices, and student engagement. Based on my definition of each construct, seven items for each construct were identified from the instrument to be coded into specific constructs for a total of 21 items. The grouping of items into different constructs was then member checked with five of the cadre leaders for accuracy. An N of 64 was used

for the STAI numerical scores (Quantitative Measure 2). I requested descriptive statistics and effect size to show statistically significant growth and to compare means.

A reliability analysis on the STAI was also conducted using the Alpha Coefficient, also known as Cronbach's alpha (Cronbach, 1951). Standard procedures were followed using an alpha level of 0.70, which is a commonly used cut-score to determine instrument reliability and proper construct mapping (Nunnally, 1978).

Qualitative data. Qualitative data was collected from the STAI, blog posts, and video annotations. I applied a grounded theory approach to compare constructs with the data sets (Glaser & Strauss, 1967). I utilized an inductive coding method to review the data. The first step in my qualitative data analysis was to identify the key points that were marked with a series of codes taken directly from the text (Glaser & Strauss, 1967). This was done with one-third of each data source. I utilized open-coding to code patterns in their responses to help identify larger, summative concepts (Glaser & Strauss, 1967; Cresswell & Clark, 2007). The larger, summative concepts (codes) were then grouped into similar concepts from which categories were formed (Glaser & Strauss, 1967). Through a constant comparative method, I reviewed the remainder of the qualitative data using the defined categories to refine the coding either further (Strauss & Cobrin, 1990). The categories then became the foundation for creating assertions. These steps were conducted in electronic form line by line using Hyper Research (Glaser & Strauss, 1967). The entry and coding processes revealed important patterns and assertions of the study.

Complementarity of Data

Within this study, the qualitative measures complemented the quantitative measures with an equal weight given to each. A complementarity chart is located in

Appendix K. All instruments of this study aligned with the constructs of student engagement, instructional strategies, and classroom management. The data from the quantitative self-efficacy survey provided a numerical number of the extent a multicomponent distance learning induction program impacts first-year intern teachers sense of self-efficacy.

The qualitative measures of the video annotations, blog prompts, and STAI narrative response helped to answer the sub-question for Research Question 1, in what ways the intern teachers' instructional practices, student engagement, and classroom management changed during the induction program. This qualitative data complemented the quantitative measures as described in Research Question 1 Teachers' Sense of Self-Efficacy Tool.

The data from the qualitative measure of video annotations, blog prompts, and STAI narratives sought to inform the second research question of what ways intern teachers felt supported in a distance learning induction program, a qualitative question. These same qualitative measures also informed the third Research Question of what intern teachers describe as the areas in which they struggle, strictly another qualitative question. The STAI quantitative data from the pre and post complemented the qualitative data of the narrative comments from the STAI. This information not only demonstrated how the evaluations on STAI in the construct areas of student engagement, instructional practices, and classroom management changed from the first observation to the second, but also helped to inform the impact of a multicomponent distance learning program on first-year teachers' sense of self-efficacy in the construct areas as seen in Research Question 1.

Chapter 4

Data Results

The chapters in this study thus far provided a discussion of the problem, a look into current literature on the related topic, and a description of each data source specifically utilized. The discussion in Chapter 3 included information regarding the construction/origin of the instrument, data collection method, and the validity and reliability of each instrument. The purpose of Chapter 4 is to provide a comprehensive description of the data analysis techniques utilized in the data results of supporting first year alternatively certified urban and rural intern teachers through a multicomponent distance induction program. Chapter 5 will specifically address the complementarity methodology used to answer the study's research questions.

This action research study was a mixed-methods study employing both quantitative and qualitative data to answer the following research questions:

1. To what extent does a multicomponent distance learning induction program impact first year intern teachers' sense of self-efficacy in the areas of student engagement, instructional practice, and classroom management? In what ways do the intern teachers' student engagement, instructional practice, and classroom management change during the induction process?
2. In what ways do intern teachers feel supported in a distance learning induction program?
3. How do intern teachers struggle in their first year of teaching?
4. How do the intern teacher evaluations on the Student Teaching Assessment Instrument (STAI) in the areas of student engagement, instructional practices,

and classroom management change from the September/October observation to the November/December observation? What were the findings of the cadre leader in regards to the intern teachers' performance?

Five data sources, both quantitative and qualitative, were collected in an attempt to answer the research questions. The first section of this chapter will present the quantitative data results including the Teachers' Sense of Self-Efficacy Survey (TSOSES) and the Student Teaching Assessment Instrument (STAI). The second section continues the data results discussion focusing on the qualitative data including blogs, video annotated comments, and the narrative comments on the STAI.

Quantitative Data

Within this study, two types of quantitative data were collected: (a) Teachers' Sense of Self Efficacy survey and (b) Student Teaching Assessment Instrument. The quantitative data sources were collected throughout the study by various means as described in Chapter 3. This section will summarize the purpose of each instrument, description of data analysis, and report the statistical results.

Teacher's Sense of Self-Efficacy Survey analysis and results. To address the first component of Research Question 1, *To what extent does a multicomponent distance learning induction program impact first-year intern teachers' sense of self-efficacy in the areas of student engagement, instructional practice, and classroom management*, the TSOSES was utilized to analyze the study participants' self-reported sense efficacy in 3 constructs: student engagement, instructional practice, and classroom management.

Description of data analysis. After receiving pre and post survey data in SurveyMonkey, the data were exported to an Excel spreadsheet for the purposes of data

manipulation. Using MEID as the unique student identifier (a number generated by Black Water College for each intern), pre and post survey data were matched together. Only those surveys that had a matching pre and post survey were utilized in this research. Five missing surveys and 3 study participants, those which permission to use was not granted, were removed from the spreadsheet.

This Excel spreadsheet was then imported into a statistical software package, SPSS20. The survey was designed using a nine-point Likert scale. The pre and post TSOSES asked exactly the same questions and required the survey participants to answer all questions; therefore no missing answers needed to be addressed.

Reliability and statistical results. For each of the 3 constructs, Cronbach's alpha values were determined based on the pre and postsurvey responses from the 29 out of 75 participants. The results, as shown in Table 7, range from .836 to .922 proving to be in the Good to Excellent range (Cronbach, 1951).

Table 8

*Current Study Cronbach alpha Coefficient Measures of TSOSES Constructs
Student Engagement, Instructional Practices, and Classroom Management*

Construct	N	Cronbach's Alpha
Student Engagement	8	.894
Instructional Practices	8	.836
Classroom Management	8	.922

A paired-samples t test, a repeated-measures design ANOVA, was conducted to assess if a multicomponent distance learning induction program impacted first-year intern teachers' sense of self-efficacy in the areas of student engagement, instructional practice, and classroom management. The results indicate that there was a significant difference of .015 in the area of instructional strategies and a significant difference of .043 in classroom management. However, in the area of student engagement a significant difference was not found (.187). See Table 8.

Table 9

Current Study Paired-Samples t-test of TSOSES Constructs Student Engagement, Instructional Strategies, Classroom Management

Pair		Mean	<i>t</i>	<i>df</i>	Sig. (2-tailed)	<i>r</i>
1	StudEngage.1: Student Engagement					
	StudEngage.2: Student Engagement	-1.827	-1.352	28	.187	.248
2	InstructStrag.1: Instructional Strategies					
	InstructStrag.2: Instructional Strategies	-2.448	-2.591	28	.015	.440
3	ClassMngmnt.1: Classroom Management					
	ClassMngmnt.2: Classroom Management	-2.689	-2.119	28	.043	.372

In simple terms, the effect size Pearson's *r*, measures the relationship between two variables. Strong relationships show a large *r* value of 1.0 to .50, medium

relationships are reflected in an r value of .05 to .30, and a small r value relationship is .3 to .10 (Cohen, 1992). A t test is a special case of ANOVA and is an equivalent test as both are repeated measures analysis of variance. 'Small' effect sizes tell that something is happening but it can only be observed very carefully while 'large' effect sizes demonstrate that something is happening that can be easily seen. Student engagement has a small relationship. Instructional strategies (.440) and classroom management (.372) each fall in the medium relationship range.

Student Teaching Assessment Instrument analysis and results. To address Research Question 4, *How do the intern teacher evaluations on the Student Teaching Assessment Instrument (STAI) in the areas of student engagement, instructional practices, and classroom management change from the September/October observation to the November/December observation?*, the STAI was analyzed to determine the reliability of 3 constructs (student engagement, instructional practice, and classroom management) using SPSS.

Description of data analysis. In analyzing the quantitative data for the STAI, the pre and post survey data were imported into the statistical software package, SPSS20. The STAI utilizes a rating scale of 1 to 5 where 1 is "Needs Improvement" and 5 is "Commendable". See Appendix G to view the entire survey. The pre and post STAI had the cadre leader evaluate the intern on exactly the same items. The Google form required the cadre leader to enter in all evaluation items; therefore no missing answers needed to be addressed. Nine out of 75 intern teachers' STAI scores were not included in the analysis due to only having one evaluation or the other but not both.

Reliability and statistical results. In determining the constructs, the researcher considered each of the instrument's prompts and categorized criteria items into each of the 3 constructs. For each construct, seven unique items were identified. For each of the 3 constructs, Cronbach's alpha values were determined based on the pre and post survey observations of the 64 participants. A Cronbach's alpha was determined with the scores of .730 to .903 to conclude an internal consistency or reliability of the instrument to be in the "Acceptable" to "Excellent" range (Cronbach, 1951).

Table 10

*Current Study Cronbach alpha Coefficient Measures of STAI Constructs:
Student Engagement, Instructional Practices, and Classroom Management*

Construct	N	Cronbach's Alpha
Student Engagement	7	.895
Instructional Practices	7	.730
Classroom Management	7	.903

A paired-samples *t* test, a repeated-measures design ANOVA, was conducted to assess how the intern teachers' observations scored on the Student Teaching Assessment Instrument (STAI) in the areas of student engagement, instructional practices, and classroom management change from the first observation to the second observation. The results indicate that there was a significant difference in all 3 constructs. A significant difference was found of .000 in the area of student engagement, .006 in instructional strategies, and .011 in classroom management. See Table 10.

Table 11

Current Study Paired-Samples t test of STAI Constructs Student Engagement, Instructional Strategies, Classroom Management

Pair	Mean	t	df	Sig. (2-tailed)	r
1 StudEngage.1: Student Engagement StudEngage.2: Student Engagement	-1.984	-4.212	63	.000	.469
2 InstructStrag.1: Instructional Strategies InstructStrag.2: Instructional Strategies	-1.625	-2.863	63	.006	.339
3 ClassMngmnt.1: Classroom Management ClassMngmnt.2: Classroom Management	-1.343	-2.663	63	.011	.315

Each of the pairs above fall in the medium Pearson r effect size relationship range.

Qualitative Results

Within this study I utilized three types of qualitative data: (a) blogs, (b) video annotated comments, and (c) student teaching assessment instrument narrative comments.

The qualitative data sources were collected throughout the study by various means as described in Chapter 3.

Blogs. To address Research Question 1, *In what ways do the Intern teachers' student engagement, instructional practice, and classroom management change during the induction process?*, Research Question 2, *In what ways do Intern teachers feel supported in a distance learning induction program?*, and Research Question 3, *How do*

intern teachers struggle in their first year of teaching? the study participants were asked to create a weekly blog, an online journal entry, with thirteen open-ended prompts.

Description of data analysis. All responses were copied out of the blogging tool in Epsilen (an online learning management system) and pasted into simple text files (.txt). These text files were then brought into HyperResearch, a qualitative coding software program, for data analysis. Blogs were treated as the first case within HyperResearch. The data analysis steps for all qualitative data sources once entered into HyperResearch is described later in this section.

Video annotations. To address Research Question 1, *To what extent does a multicomponent distance learning induction program impact first-year intern teachers' sense of self-efficacy in the areas of student engagement, instructional practices, and classroom management?*, the annotated comments within the video annotation tool, Wistia, were analyzed following the open-coding process.

Description of data analysis. I entered the annotated comments from Wistia into an Excel spreadsheet. After recording the individual comments into a spreadsheet, the data was manipulated using a unique student identifier. Comments by those which permission to use was not granted (5 students) were removed from the spreadsheet. Once organized in Excel, the comments were then copied and pasted into simple text files (.txt) per intern or cadre leader. These text files were then brought into HyperResearch, a qualitative coding software program, for data analysis as the second qualitative case.

Student Teaching Assessment Instrument narrative comments. To address Research Question 4, *What were the findings of the cadre leader in regards to the intern*

teachers' performance? the comments provided by the cadre leaders from two formal classroom observations of the study participants teaching in the classroom were analyzed.

Description of data analysis. In analyzing the qualitative data from the STAI, the pre and post survey data was entered by the cadre leaders into a Google Form after each observation. The pre and post STAI had the cadre leader evaluate intern on exactly the same items. The Google form required the cadre leader to enter in the narrative comments from each instrument. If a study participant only had one observation or the other but not both, his/her STAI narrative data was not included in this analysis. The STAI narrative data was then recorded into an Excel spreadsheet. Comments for those whose permission to use was not granted were removed from the spreadsheet. Once organized in Excel, the comments were then copied and pasted into a rich text file (.rtf). The text file was then brought into HyperResearch, a qualitative coding software program, for data analysis as the third case.

Overall description of data analysis . The three types of qualitative data were treated as separate cases within HyperResearch: (a) blogs, (b) video annotated comments, and (c) student teaching assessment instrument narrative comments. For each qualitative data source, I first applied the grounded theory approach utilizing inductive coding methods to review the data sets (Glaser & Strauss, 1967). In my qualitative data analysis, the first step was to identify the key points that were marked with a series of codes taken directly from the text for a third of each data source (Glaser & Strauss, 1967). From this analysis, 103 codes were first identified. I utilized open coding to code patterns in their responses to help identify larger, summative concepts (Glaser & Strauss, 1967; Creswell & Clark, 2007). The initial 103 codes were collapsed into 22 larger summative

categories. The remaining two-thirds of each of the three data sources were coded using the larger summative categories. While reviewing the data sources of video annotations and the Student Teaching Assessment Instrument, I determined that due to the uniqueness of these data collection tools, another significant category emerged. This summative category was named “Flip Camera and Technical Issues”. This was an imperative issue to capture as the other data sources lacked the technical complications that this source had. I continued to review each of the qualitative data sources using the defined categories to refine the coding even further (Strauss & Cobin, 1990). I reviewed each data source a second time to confirm the summative categories and applied open coding to new ideas that presented themselves in this review. The categories then became the foundation for constructing themes. The entry and coding processes revealed important patterns and themes of the study. Appendix K summarizes this information.

Using the 22 categories, I constructed themes that would be relevant to answering the research questions within this study. Table 11 summarizes the themes which were constructed from the categories and the research questions addressed by the themes.

Table 12

Themes: Intern Teachers Qualitative Responses

Themes	Categories	Research Questions
Theme 1: Intern teachers request additional opportunities to build relationships with other education professionals as they attribute their successes in the classroom to networking with their peers.	Support from district and/or administrative level, networking and/or support from peers	1,2
Theme 2: Intern teaching skills were positively impacted due to feedback by the cadre leader in the areas of student engagement, instructional practices, and classroom management.	Student engagement, instructional practices	1,2,4
Theme 3: Intern teachers identified struggles during the intern program.	Intern personal feelings and well-being, classroom management, technology practices impacting the classroom	3
Theme 4: Intern teachers made progress in the area of student engagement; however, as identified in the survey, they do not feel more efficacious in this area. Interns and cadre leaders worked on engagement and appear to have made progress in the area of student engagement (as identified in the pre/post qualitative STAI analysis).	Instructional practices, student engagement, classroom management, cadre leader references, observations of self or others impacting instructional practices, planning for instruction	1,4
Theme 5: Intern teachers applied concepts taught in Black Water College courses to the K-12 classroom	Cadre leader references, instructional practices, Black Water College impact to classroom, observations of self or others impacting instructional practices	1,2
Theme 6: Black Water College enables career success	Black Water College impact to classroom, networking and/or support from peers	2

Inductive themes. The themes presented were constructed based on the multiple categories identified in Table 11 and are not in an order of importance. The relationship of the individual ideas that the categories represented to each other and their meanings led to the construction of the themes.

***Theme 1.** Intern teachers request additional opportunities to build relationships with other education professionals as they attribute their successes in the classroom to networking with their peers.* Intern teachers indicated within the blog entries (213 instances) and annotated video comments (1 instance) how networking and sharing with peers contributed to their successes in the classroom. This networking and sharing with peers ranged from their intern peers and cadre leader at Black Water College to their mentor teacher and teaching peers within their individual school sites.

Black Water College's distance learning program is offered online to intern teachers across Arizona. Intern teachers in this program can be hundreds of miles apart from one another. Unlike an in-person program, intern teachers normally do not have an opportunity to meet each other in-person. Components of the distance learning program provided opportunities for intern teachers to connect synchronously. One intern teacher's blog entry expressed the importance of his conversations in contributing to his effectiveness as an educator. This intern teacher's blog was representative of the overall comments in this area:

My peers in our weekly webinar helped me realize that there were others going through the same things that I was going through in my classroom. It helped to hear how they were dealing with their issues and the ideas and thought processes they went through helped me tailor and adapt my classroom management, and instructional practices.

The relationships with Black Water College intern peers attributed to intern teachers' success in the classroom. Through the peer interactions, intern teachers were supported academically, emotionally, and pedagogically contributing to their classroom success.

Another intern teacher stated how intern peers contributed to her success, specifically, in classroom management, "I was able to glean some ideas, especially in regards to classroom management, from my peers."

What did the intern teachers specifically find the greatest benefit that contributed to their success from their peers at Black Water College? Supporting comments included:

The greatest benefit from my peers at Black Water is the exchange of ideas. It is interesting to learn about techniques and tools that they use in their classroom. Each one of us brings varied experience to the table. I think it is valuable to find out what is working and not working in their classrooms. I take from my cadre members ideas and implement them in my own classroom.

The impact of an intern teacher's success also was reliant upon the cadre leader's relationship with the intern teacher. An intern teacher commented related to the cadre leader in that:

The cadre leaders are just able to help give simple steps, advice and pointers that can make huge differences over times. Of course, this is not always the case but when you have someone that has been in your shoes and has years of experience on you there is inevitably going to be some things tips and keys to success that have worked for them in the past are backed by statistics and studies that can help anyone improve every aspect of their own classroom.

The cadre leaders were veteran teachers in the same specific content area in which the intern teachers were teaching. The rich prior experience and the content knowledge that each cadre leader held influenced the discussions and feedback with the intern teachers.

Other instances refer to the relationship with mentors at the school in which they work. A condition of the intern certificate from the State Department of Education requires that the district or charter provides a mentor teacher to work with the intern. This mentor relationship also contributes to the intern teachers' success as demonstrated by a representative comment by one intern teacher:

She also gives me different ideas and strategies to use in the classroom. In the beginning we talked about different classroom management strategies but now that I have classroom management under control we talk about different ideas to use for student engagement and instruction.

This quote demonstrates that when success is seen in one area, the conversations did not cease, but instead continued in different pedagogical areas for additional growth. For another intern teacher, the use of an instructional coach's position is also invaluable, as she stated "We have instructional coaches in my district and they have been great at helping me adjust especially in the beginning of the year. I have gotten great tips from them on things I should be doing."

Another relational source for success was found in the intern teachers' blog comments regarding their teaching peers at the school site. These teaching peers provided a different angle of support. As one participant states:

My school peers have been extremely helpful in any success I've had as my first year. In particular, there is one teacher who is in my group (6-8th) who is also a Teach For America Corp Member. Her instruction on how to navigate the politics and paperwork of a first year teacher have been invaluable.

While Black Water College cadre leaders and intern peers provide information regarding general teaching practices and pedagogy, the specific school mentor and peers help participants be successful within a very specific school environment. Each school, even within the same district or charter system, has its own culture, policies, and regulations.

Relationships within the school site contributes to the intern's success by learning how to navigate the system by those who are most familiar.

Overall, comments made by the intern teachers specifically pointed out the need to reach out to others for knowledge and advice. A collection of representative comments included:

- “I need to do more research and reach out to more people for help.”
- “One area that I could improve on is to be more communicative via email with any specific questions I might have.”
- “But I think we all are so busy that we forget to work with teachers in other departments until we have to go to a meeting or something.”

Such comments were expressed by multiple students showing a repeated trend. These comments demonstrate to me as the researcher that students do know the value that networking with others plays in their successes in the classroom be it someone from their school site or a representative from Black Water College. The relationships with other education professionals was valuable and intern teachers thought that they could benefit from additional opportunities for building these relationships.

Theme 2. *Intern teaching skills were positively impacted due to feedback by the cadre leader in the areas of student engagement, instructional practices, and classroom management.* In analyzing the qualitative data for both the comments in the STAI and video annotations, it was evident that specific attention was being made to how the intern teachers conducted student engagement, utilized instructional strategies, and conducted classroom management. Each set of comments demonstrated a different point of reference whether it was from the perspective and experience of the cadre leader's

observations, self-reflection of the intern teacher, or by other Black Water College interns.

STAI comments. Comments on the STAI were written only by the cadre leader commenting on the intern teacher's classroom practices for a specific period of time observed. These comments were shared in written form with the intern teacher on a written evaluation form and shared orally in a post observation discussion.

*Observation of classroom instruction.

A. Presents Lesson Content		
5	Secures attention (CEC 4):	Excellent implementation of the "Quiet Signal".
5	Connects to prior learning/knowledge (APTS: 3.3, 3.10, 8.6, CEC: 1.4, INTASC 1.23,3.35):	Linked to prior learning.
4	Explains purpose/objectives (APTS: 3.2, 3.10, 7.5 CEC: 1.4):	Objective stated.
4	Uses variety of teaching methods (APTS: 8.1, CEC: 1.2,3,4 INTASC 2.3,4.11,4.12,4.13):	Students totally engaged.
4	Initiates learner involvement (APTS: 2.7, 3.12, 3.13, CEC: 1.2, 3, 4, INTASC 3.6,5.22):	Students actively participated.
4	Maintains learner involvement (APTS: 2.6, 2.7, 3.12, 3.13, CEC 1.2,3,4 INTASC 3.6,5.22):	Authentic learner involvement.
5	Checks for understanding (APTS: 3.15, CEC: 1.4, INTASC 4.8):	Good checks for understanding.
5	Closes interaction appropriately (APTS: 3.1, CEC: 1.4):	Proficient...
36	Total	

B. Communicates Clearly and Accurately		
5	Provides clear instructions (APTS: 3.5, 3.6, CEC: 4.6):	Clear and concise instruction noted.
5	Solicits learner responses (APTS: 3.12 CEC: 4, INTASC 2.33,5.15,5.22):	Good level of rigor and relevance.
5	Gives feedback during lesson (APTS: 2.8, 3.12, 4.4 CEC: 4.6):	Warm and inviting feedback.
5	Uses age-appropriate, accurate grammar (APTS: 3.6, 7.1, CEC: 6, INTASC 3.31):	Age Appropriate.
20	Total	

Figure 1. Example of comments provided by a cadre leader on a written evaluation form.

Comments were written on the STAI by the cadre leader that served a variety of purposes for the intern teacher. Multiple examples of cadre leaders' comments on the STAI are similar in content to the following quotes, "Provide more than one activity in conjunction with ziploc bag; perhaps have students write two sentences and circle verb and identify helping verb" and "Fishbowl activity worked well overall. One suggestion is to require students to read and make a few bulleted notes on each topic for the fishbowl discussion prior to beginning." Cadre leaders typically provided specific feedback on what they saw in the specific observation and then followed-up with praise or suggestions for how to improve practices.

The STAI provided an opportunity for pointing out behaviors of the intern teacher in the classroom and students as it relates to student engagement, instructional practices, and classroom management during an observation. Several examples can be seen in the STAI through brief comments such as, "The teacher greeted students at the door with Spanish questions to set the tone." More in-depth accounts of the classroom observation were also seen in several instances:

She started with serving the class tea and discussing the Tea Party while she was serving and drinking the tea. She questioned the students about their knowledge and showed a video depicting the Boston Tea Party. They answered questions and discussed concepts. Then she had a handout for them to complete.

Another cadre leader commented on the STAI providing details:

Reviewed creative writing and told them what they were doing. Used pumpkin to use imagination to guide creative writing. Asked them to think about _____. Used words they understood and used what they knew. Generated ideas by brainstorming. Helped by explaining left and right. Walked the room and asked questions. Got the students up and involved. Praised them. "I like how _____ is paying attention."

The cadre leaders used detailed comments to paint a picture as to what they observed the intern teacher and students doing. Detailed comments help to provide a richer background of what was seen in the observation to be discussed at a later date during the post observation conference – a discussion between the intern teacher and the cadre leader about the observation.

Cadre leader's comments can also combine what was seen along with confirming the actions done correctly:

The students are working on dialogue and punctuation for dialogue. She has them describe verbally and then write sentences. She begins with objectives and easily moves to dissect elements of story. She had scripts for a story called Red Fox. Had them highlight in yellow. She uses praise easily, "Okay, Good, That's right, Good job". Asked questions and had sentences as guided activity. Perfect script and story for this grade students. Had them take a look at dialogue and asked for clue. "What is a quotation?" How do you know? She is professional and writes with correct grammar. Working on sounds started with review. Each student took turns with the sounds and did it together.

During an observation, if a cadre leader noted a lack of clarity as to why something was happening or the point which the intern teacher was attempting to make, those types of comments are also seen in the STAI to help clarify what was observed:

Not sure what measure [the students were] using to prove the soil holds more water. Needs to be clearer. They were to graph the results of the experiment in red on paper. Students took turns and worked together to measure the soil and the water and observe which one held the most water. Students listened to directions and answered Elizabeth's questions.

The intentions of the comments on the STAI can serve a variety of purposes. The quotes demonstrate the cadre leader's ability to point out specific actions happening in the classroom. Comments served the purposes ranging from telling the intern teacher to continue doing certain practices, discontinue, or suggestions to enhance student engagement. The detailed comments by the cadre leader of the observation are then

utilized in the post observation discussions as examples to improve student engagement, instructional practices, and classroom management.

Video annotation comments. Intern teachers were required to post 3 to 5 minute video recordings of their teaching practices related to the topic that was being discussed for the week in the cadre groups. These video segments were uploaded into Wistia where the cadre leader and other intern teachers within their group could comment. Unlike the STAI comments which were solely one-sided based upon the cadre leader's observation or interpretation, the video annotation comments reflected the thoughts of the intern teacher, the intern teacher's peers, and/or the cadre leader. The comments link to various instances within the video. The reviewer clicks on the comment to go to that point in the video. One viewing the comment could then watch what was being commented on over and over. Unlike the STAI comments, where the comment is made regarding something that happened previously, there is a direct example pertaining to the comment. This allows intern teachers to explain what they believe is happening in terms of student engagement, classroom management, and instructional practices. For example:

In this game we are playing, the students are practicing their basic math skills: multiplication. Most of these students struggle with basic skills. We worked on multiplication for weeks, but this game is great for the visual, logical and kinesthetic learners. There is 100% engagement/participation - no zoning out. This game is fun and the kids learn strategy after playing it a time or two, which also helps with their analytical skills.

Another example comment by an intern teacher commenting on the video segment:

It is a questioning technique that I typically ask my students. I will ask for students to stand up if they know the answer. Then, I will call on either a person standing up or someone who is still seated. This means that I can change up who I am asking questions to and when, basically making kids participate. Overall, it's a technique that I enjoy, and I think the kids enjoy it too.

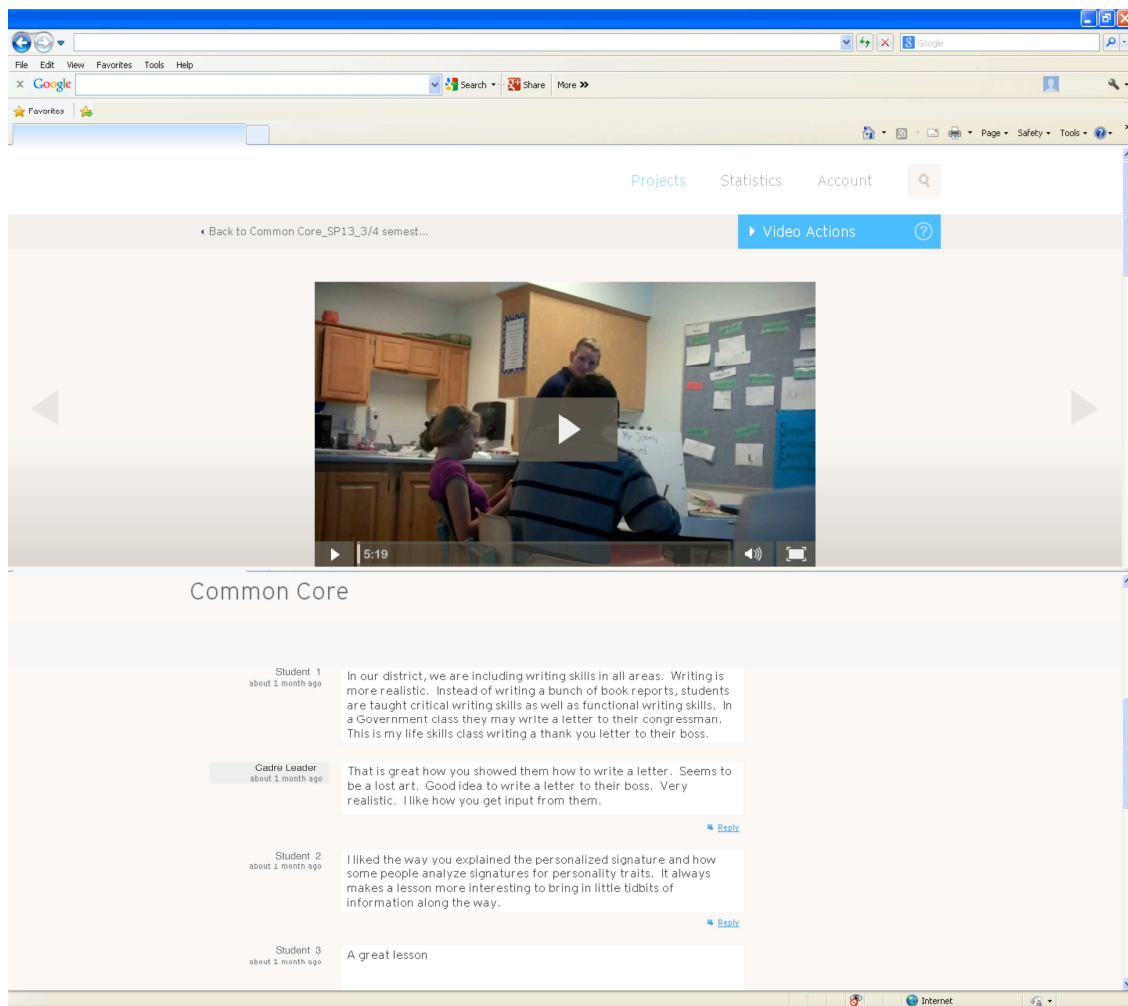


Figure 2. Example of discussion within Wistia between a cadre leader and intern teachers.

Intern teacher peer comments reinforced student engagement, instructional practices, and even classroom management strategies. These comments may reinforce something that they liked seeing in the video segments such as, “I love how you appealed to different learning styles here, using both the visual presentation and the physical presentation of making the sandwich. That’s a good way to describe an essay--a technique I could use for expository. It’s neat to see others in action. Good job, A!”

Comments by other intern teachers can also describe something they would like to use within their own classroom, “I like the way you spoke calmly to the agitated student...I will use this technique. I always get unhappy students and sometimes I run out of things to try.”

Cadre leaders’ comments on the video segments regarding student engagement, instructional practices, and classroom management were similar in context to the STAI comments with the difference of the comments were hooked to a concrete example on video that could be reviewed over and over again for analysis. Comments by cadre leaders included information on how to improve such as, “I think it would have been a great learning opportunity to pause and ask them questions about the facts. Like, how much did they weigh or what does hippo mean. It would add to the lesson.” Cadre leaders video annotated comments also included reinforcement for practices done well as seen in this cadre leader’s example, “I liked how you asked questions and waited for an answer. It was good when you said for them to think about it.” The intern teacher in this segment, and/or the intern peers, could use this as an example of what “wait time” looks like. This is an instructional practice that could be discussed but actually seeing it in action puts real meaning to the strategy. Within the video annotations, written comments were made by both the intern teachers and cadre leaders. The annotations were linked directly to a point in time within the video example of the classroom observation. Intern teachers had the opportunity to comment within other intern teacher’s video segments and cadre leaders could comment on each of the intern teachers’ videos.

In bringing Theme 2 to a close, intern teachers received feedback on their classroom practices in formal and informal methods. The purpose of this feedback is for

intern teachers to use in modifying their classroom practices. Peers and cadre leaders both support and provide feedback to the intern teachers. Video provides concrete visual examples of teaching practices to informally provide feedback by intern peers and cadre leaders. Specific written feedback on the evaluation instrument (STAI) offers the intern a qualitative explanation to how specific components are being implemented within their teaching practice.

Theme 3. *Intern teachers identified struggles during the intern program.* Intern teachers were able to articulate their successes with student engagement and instructional practices, yet they also expressed many struggles and obstacles from the beginning of their program. The qualitative responses demonstrated struggles such as lack of time, organization, health, and family issues.

Being an intern teacher requires being the full time, teacher of record in a K-12 classroom taking on full responsibility of the classroom, the same requirement of fully certified veteran teachers. As intern teachers can be certified with little to no prior classroom experience, they often find that they are establishing their classroom practices and curriculum for the first time with little to no resources of their own. This can be challenging as this student's blog entry suggests:

I am extremely prepared. That is why I am behind on the Black Water College work. I give most of my time to making sure I am at my absolute best each and every day for my students. I do not give myself a minute of rest until I am convinced that I totally prepared for each and every lesson.

Along with the full K-12 classroom responsibility, intern teachers are also required by the Department of Education certification requirements to be enrolled in a certification

program. Interns take between 9 and 12 credit hours per semester while at Black Water College. This balance of K-12 classroom work and Black Water College coursework can be daunting.

The issue of time was not a unique comment. Whether it is time spent dedicated to their students, time spent on their Black Water College coursework, or time with their personal families, intern teachers always seem to be chasing the clock. Even for those interns who seem to have a plethora of resources and strategies, finding the time to adequately plan is often lacking: “I feel I have a variety of resources and instructional strategies to use. However, I often have insufficient planning time to think out how to implement and perfect these strategies.” Another describes this time demand issue, “To be honest I am OK mentally, but physically the job of teaching takes tons of time, especially in the first couple of years.” Intern teachers reflected that the needs of their K-12 students come first over their own Black Water College coursework, “Often, I put what was needed for my classroom before my Black Water College coursework, so I did not have time to study as much as I would have liked for midterms and finals.” Another intern teacher reflects on this same issue through her statements of, “When you make closing the achievement gap your top priority it is very hard to put Black Water College homework in front of that.”

The majority of the intern teachers reported that the demands of teaching full time and being a full time college student themselves are a difficult task. One intern teacher articulates the following collective statement:

Emotionally and physically I feel completely overwhelmed, defeated and incapable of doing all the things I need to do to be effective. I have a hard time motivating myself to teach random facts that I cannot personally connect to real life, like trenches and rocks. Seems like something that is irrelevant to me creating good lessons and spending time with students constantly pull time from me developing the way I need. I do not feel like I get through to the most difficult students. Honestly, I'm learning how to get through to the non-difficult students.

As evidenced by statements in the blogs, intern teachers reported that they became emotionally and physically drained during this first semester. The emotional and physical toll can be seen in their K-12 classroom and/or Black Water College performance. As for the K-12 classroom, the intern above states the lack of energy and motivation to teach basic, isolated facts given how overwhelmed he feels. The intern recognizes that effective instructional and student engagement practices requires hours of purposeful planning and making connections to real life application. The intern teacher is not thinking of how to challenge students to the next level or how to connect concepts together in a meaningful way. When intern teachers lack the energy/motivation to teach basic, isolated facts, students suffer.

Performance issues within the Black Water College courses is also seen when intern teachers are experiencing emotional and physical issues. Many intern teachers find that they have emotional outbursts and find that they become sick more often throughout the year. One participant recalls the emotional and physical release of this experience, "Overall, I'm feeling good. However, I think I've been more emotionally stressed than ever. I do not cry overly much, but I seem to cry at the drop of a hat the moment. I've also

been sick twice this year.” Another student describes this experience as overwhelming and stressful, “At this point in my teaching experience, I am feeling very overwhelmed! I think that the combination of Resident Teacher classes and trying to get acclimated to being a new teacher is quite stressful.” Intern teachers personally feel the demands of the K-12 classroom and the Black Water College requirements.

Personal health and family issues is another factor that intern teachers experienced during this time. This was an additional struggle that intern teachers faced, contributing to this sense of being overwhelmed. Although many interns experience similar feelings, many are more optimistic and find ways to deal with the issues. Not all the interns are discouraged and overwhelmed. Others persist through the feelings and experiences as seen through this students’ comment:

This year has been an emotional rollercoaster. I consider myself incredibly optimistic. My wife faced many unforeseen illnesses this year, and it took a toll on me physically and mentally. I have kept a positive attitude through it all. I work in a self-contained classroom for students with emotional disturbance, and some of them come from deplorable living situations. Many have been abused. A lot of anger and frustration is channeled at me some days. My main strategy is to care about them unconditionally and never take anything personal. I treat them equally and justly each day, regardless of the day before. I hold them to the highest expectations, even on their bad days and let them know that I care.

Evident by the qualitative response above, this intern teacher demonstrates signs of persistence even as the struggles become tough; they continue to press on in making a difference in the education of their students.

In summary of Theme 3, the Resident Teacher program is a challenging program requiring many hours in and outside of the K-12 classroom. While the program offers an incredible opportunity, intern teachers struggle with balancing time between the demands of classroom teaching, college coursework, and family demands. The stresses of these

demands are exposed through emotional and physical signs in addition to struggles within the K-12 classroom and college coursework.

***Theme 4.** Intern teachers made progress in the area of student engagement; however, as identified in the survey, they do not feel more efficacious in this area. Interns and cadre leaders worked on engagement and appear to have made progress in the area of student engagement (as identified in the pre/post qualitative STAI analysis).* Evidence from the intern teachers' blogs, video annotations by intern teachers, and cadre leaders' comments on the STAI demonstrates instances of the intern teachers' successes as related to student engagement and instructional strategies. Even at this early stage in an intern teachers' career and educational coursework, intern teachers are able to articulate their successes in these areas.

Intern teachers are able to recognize how they are improving their student engagement and instructional practices for success. One intern teacher's blog stated:

I try to be creative in my assessments, and now I am utilizing more manipulatives in my assessments. It seems to keep the students more engaged when I use the manipulatives so that they can show me more instead of just trying to tell or explain things to me.

The intern teachers' continuous application of Black Water College pedagogical coursework in the K-12 classroom challenged their students to engage at a higher level of thinking.

Other intern teachers find that learning does not come easy, and when it doesn't, it's not a sign of failure but one of success:

...I was using the pattern blocks of the different shapes to see if they could be placed on top of one another to make the same shape, ie: hexagon with triangles and trapezoids. Really was something watching the struggle time. The pattern blocks had to be moved around so many different ways to get it to work just right. They were figuring it out, but it took time. I have the tendency to "fix it" before the student can figure it out on their own.

Through the implementation of classroom lessons, intern teachers experience first-hand what works and what does not with their students. This experience is something that intern teachers could not have understood when reading about or discussing in typical pre-service teacher education coursework. It is in the application in the K-12 classroom with students that intern teachers experience an "ah-ha" moment, just as their own students do in learning new content, realizing the impact of their lesson with their students. It is from this experience that intern teachers then consider how to monitor and adjust their student engagement, instructional practices, and classroom management. Intern teachers may seek out other education professionals to discuss their experience to seek advice (Theme 1). The "ah-ha" moments experienced by the intern teachers allows for growth to take place and increased opportunities to try things in new and different ways allowing interns to take risks.

Intern teachers are willing to take risks as they apply new pedagogical knowledge to the classroom. Monitoring and adjusting the implementation of instructional and student engagement strategies by the intern teachers fostered successful experiences. Through the conversations with other teachers (Theme 1) about what they are experiencing and from the willingness to persevere through their struggles, intern

teachers continue to implement new strategies as described by this intern teacher, “I tried a new strategy of engagement today with time. I had the children stand up and use their hands as if they were clocks, mirroring what they saw on the big clock. Most of them enjoyed the activity.”

Other intern teachers recognize they are not using enough student engagement or best instructional practices in their lessons. Through honest self-reflection, intern teachers reflect on a daily basis as to what is happening in their classrooms successfully, as evidenced by the comments “Additionally, I need to add much more ‘hands on or project based’ instruction to my tool belt” or “I literally examine and re-examine each and every lesson in case I need to adjust for tomorrow”.

Intern teachers report that a great amount of time is spent on monitoring and adjusting their teaching to find the success in student engagement and instructional practices. Through the intern teachers’ comments in the blogs and video annotations, one is able to see the constant reflection and monitoring/adjusting. One intern student states, “In terms of student engagement, I now write in directives (rather than questions) for checks for understanding in my lesson plans. This forces all students to be engaged when I ask a question in class.” Intern teachers often expressed what practices they had to stop doing in order to achieve success, “I stopped calling on volunteers and use note cards to pull names of students. I hope to incorporate more Kagan [cooperative learning] structures so that students are engaged kinetically.”

Other intern teachers clearly stated what they were aware of that was happening within their classroom:

...I noticed that students were often 'zoning out' or having trouble staying on task when we were reading in class. I recognize that it is difficult for all students to stay on task when the class is reading - often many only pay attention when it is their turn to read. One way I plan to help keep students engaged with the literature is with reading logs. If every student is required to summarize, illustrate and comment on a passage, then regardless of whether or not it is their turn to read...they know they are responsible for the material.

This suggests to me that intern teachers are able to identify and articulate successful practices within the classroom. Intern teachers are adjusting their practices when they are not being successful and modifying instruction in hopes to be successful.

Concluding Theme 4, interns are often able to identify their success related to student engagement and instructional strategies. Communication with peers, cadre leaders, and mentors furthered the interns' ability to demonstrate success with instructional strategies and student engagement. The consistent self-reflection led to monitoring and adjusting of instructional and student engagement strategies which were implemented in the K-12 classroom contributing to the acknowledged successes. While successes were evident, honest reflection would not be inclusive without the mention of the struggles and obstacles as well.

Theme 5. Intern teachers applied concepts taught in Black Water College courses to the K-12 classroom. Theme 3 discussed the struggles intern teachers experienced, one being the struggle to balance the full time teaching responsibility with the Black Water College coursework requirements. Although this was determined to be a struggle, the positive side of this struggle was the ability of the intern teachers to

immediately apply what was being taught in the coursework to their classroom the next day, as one intern states:

Taking classes while teaching in a classroom makes the new material all the more relevant. I can implement immediately good ideas I find in my studies. The observations and feedback help immediately also. Since it is my classroom, I have more autonomy to make adjustments as needed.

Another intern describes the positive advantage of the experience, “I feel like the major advantage of participating in the TIR program opposed to a traditional teaching program is that my classroom is MY classroom. I get to set the expectations and behavior guidelines rather than have to use another instructor's rules.” Within a traditional teacher preparation program, this new knowledge would not be easily applied as classroom access for application is limited and even at times is discouraged by that of the veteran teacher’s whose classroom a pre-service teacher preparation program student is observing within. Students acknowledged the benefit of application of coursework to practice in blog responses such as, “With the use of the intern certificate, I have been able to put all that I have learned along the way into play.”

Even when the intern teacher is able to recognize the struggle that they are having within the classroom, the intern teacher looks forward to future coursework in which they are able to use their own students in their classroom to privately tutor as seen in this comment:

I do have my challenges, like a 4th grader that is struggling with 1st grade reading skills. My question is, how did this happen? She is new to our school and I am wondering did no one come along side of her until now? I have her for writing each day, too and I watch her sounding out the words she writes to spell phonetically. She lights up when she gets it. She will be my student that I will work with for my EDU271 class next semester.

The application of Black Water College coursework to the K-12 classroom that was most evident in the intern teachers' comments was classroom management practices. Within the first semester of Black Water College coursework, all students regardless of their certification area are expected to take a three credit hour course in classroom management. Providing intern teachers with specific strategies that they can apply to their classroom from the first day of school was a successful strategy as evidenced in comments such as, "Thanks to one of the courses I took, which required the reading of Harry Wong's book (2009), I was able to establish procedures from the first day of school." The textbooks utilized within the classroom management course were often reflected on within the students' comments regarding coursework implementation in the K-12 classroom. "This year I mainly used Harry Wong's (2009) ideas of developing a discipline plan, and using procedures. I don't have anywhere near the discipline problems I had last year, and the students know what to expect each time they come in the classroom." The textbook choices of Black Water College provided other resources that intern teachers were not aware of, "Black Water helped because I checked with other books, such as Fred Jones (2000), for suggestions."

Having access to these resources and a K-12 classroom is not enough for the application of coursework to the classroom to transpire. Notice in the following quote how a need is identified:

We are now entering our sixth week of school and I am still struggling with classroom management. While reading *Tools for Teaching* by Fred Jones (2000), I feel that he has been in my classroom observing! I have instituted a new program/management plan that seems to be working...We have set up our own banking system in the room. At the beginning of the week, each student is given \$500.00 to deposit into their "account"...I learned about this in one of the Master Teacher seminars at Black Water.

In order for application to happen, the intern teacher has to make the connection of what is important and how to apply it to their situation. The intern teacher demonstrates in the quote how this application of a classroom management strategy is implemented into the classroom based on a problem that was occurring.

In summary, while the basic setup of the intern program does create struggles for the teachers in the program as seen in Theme 3, the benefits of the program allow for immediate application of strategies learned within the Black Water College coursework as applied to their classroom setting. This application was evident in the qualitative analysis. Unlike traditional teacher preparation programs, interns are able to immediately learn from their experiences within the K-12 classroom.

Theme 6. Black Water College enables career success. Theme 6 was constructed based on the related categories of Black Water College Impact to Classroom, and Networking and/or Support from Peers. It was evident from analyzing the categories that the role of Black Water College minimizing the barriers to entering the classroom needed to be explored. Within a traditional teacher preparation program, there are several barriers for re-careering adults wanting to enter the profession. These barriers prevent many from entering the teaching field, bringing with them the maturity and experiences that post baccalaureate students possess. One intern teacher shares her feelings on the Resident Teacher program:

Successes? I was able to have a JOB! Amazing! This program has been a life saver. It really helped me get a jump on my career as a teacher. I wasn't sure what to do because I got my B.S. in Advertising, but wanted to teach now. This has been an excellent way to be in school but also work as a teacher, and get paid like a teacher while I complete my courses! So in other words, I would not have had the opportunity to experience ANY of this without the intern program at Black Water.

Past intern teachers have reported, anecdotally, that the reason that they did not initially go into teaching during their bachelor's program were for reasons such as parental encouragement, a prior barrier to entering teaching, to pursue other career fields or being too far through a degree to change majors at the time. As the intern teacher describes above, after receiving a degree in another field, she decided that teaching was the direction she wanted to go in. Other times, past intern teachers reported, anecdotally, that they completed a successful career for many years utilizing the initial degree but now upon retirement or layoff, they are seeking a career where they can give back...teaching! The RT program enabled people in such situations to overcome prior barriers and enter the teaching career field.

Another barrier identified in the quote above is that within a traditional pre-service program, students complete a capstone student teaching experience where they are placed with a veteran teacher in his/her classroom and either co-teach or take over the classroom responsibilities. In such a situation, the "student teacher" works full time in the K-12 classroom without compensation. The student teacher must go without pay from anywhere from nine weeks to a full semester (18 weeks). In contrast:

One success was just being able to make it through the first semester, working full time plus many late nights, going to school full time and being a wife and mother. It was a lot of work but is very rewarding. I love teaching and really enjoy my students and being able to help them and watch them grow is a great success that I would never gotten to do without the intern program.

For those students who are re-careering adults who have been supporting their families or are the sole income provider, completing a traditional program with a non-paying student teaching is not possible. The quote above demonstrates the optimism and positive

outlook that many intern teachers expressed when discussing the long hours, personal commitments, and the ability to finally do what they love...teach.

The structure of instructional practices in a traditional program can also be seen as barriers to those wanting to enter the classroom. As discussed in Theme 5, one benefit of the intern program is applying information learned in Black Water course work immediately into the classroom which is not a part of the traditional teacher preparation programs.

Being given the opportunity to teach while working through the program is invaluable. Experience is the very best teacher, after all. While working through the program, the TIR program allows for immediate application of learned skills. A traditional degree program might have a practicum experience at the end, but this program provides experience throughout.

In addition to the application of course work immediately into the classroom, this quote points out another frequent barrier in traditional programs of having limited exposure to the classroom until the capstone student teaching course at the end of the program.

Another student states: "If I was not currently an intern student, I would not be a teacher, and therefore I would not be having any of the successes I am having in the classroom with my students." Through the combination of teacher preparation course work and full time classroom experiences, career success is enabled through these practices.

Enabling career success is important, especially when the intern teachers have previously been successful in other career fields. One stated:

Teaching under the intern program has given me the opportunity to prove myself as a professional and leader with my students and among my peers. I believe I have shown great promise as a teacher as I am constantly reflecting throughout the day on things I can do better so my students can achieve more.

Intern teachers, who have experienced success in prior careers, welcome the opportunity to once again demonstrate their professionalism, even in a new career field. Many interns have also demonstrated previous leadership skills in their prior profession. It is through the intern program that professionalism and leadership is fast-tracked by providing opportunities to take ownership and responsibility in their own classroom.

In summary, Black Water College enables career success by reducing the barriers for post baccalaureate students to enter the teaching field. The intern certificate allows a viable option for those who cannot be without an income when completing a traditional student teaching experience through employment as the teacher of record on the intern certificate receiving a pay check while completing their certification courses. Interns taking ownership of their own practices within the classroom allows for interns to demonstrate professionalism and leadership in the K-12 environment.

Summary

This chapter provided a comprehensive description of the mixed-methods data analysis techniques utilized in the data results for my innovation of supporting first year alternatively certified urban and rural intern teachers through a multicomponent distance induction program. The five data sources, both quantitative and qualitative, which were collected in an attempt to answer the research questions were described within this chapter. The quantitative data results from the Teachers' Sense of Self-Efficacy Survey (TSOSES) demonstrated a significant difference in the constructs of instructional practices and classroom management. The Student Teaching Assessment Instrument (STAI) presented significant different findings in all three constructs of student engagement, instructional practices, and classroom management. Each were described in

detail within the first section of this chapter. The second section continued the data results discussion which focused on the qualitative data including blogs, video annotated comments, and the narrative comments on the STAI.

Chapter 5 specifically addresses the complementarity methodology used to answer the study's research questions. Assertions will be discussed, utilizing both the quantitative and qualitative data, and attempts will be made to answer the study's research questions in a complementarity method. The interpretation of the data described in Chapter 4 will be discussed in Chapter 5. Specifically, what this data means for Black Water College will be discussed in the next chapter.

Chapter 5

Findings

My action research project for this study originally set out to solve a real workplace problem involving intern certified teachers. Some intern teachers were not successful, in part, because they appeared to be struggling with classroom management, instructional practices, and student engagement. K-12 school administrators identified these struggles and placed some intern teachers on improvement plans. Another anecdotal problem reported was that intern teachers did not feel supported and were struggling to complete programmatic coursework due to lack of communication, support, and health/personal issues. The non-completion rate of the intern teacher, including those teachers who chose to leave the profession prior to completing the program, ranged from 15.23% to 36.84% depending on the year.

Although the study research questions did not focus on the non-completion rate, I hoped that creating a distance based induction program at Black Water College would solve the programmatic issues of the Resident Teacher program in the areas of classroom teaching practices, communication and support which, anecdotally, led to reasons for not completing the Resident Teacher program. Health and personal issues were not directly in control of the college. The innovation in this study was created to provide a support and communication structure. It was projected that with this structure in place, intern teachers could not use lack of support or communication from the college as another barrier or excuse for their struggles. Etienne Wenger's theoretical work on communities of practice (2002, 2008) informed the innovation's basic structure. In addition, the best

practices from various induction programs reviewed in Chapter 2 contributed to the creation of the induction program. As the research practitioner in this study, my role was to develop the innovation based on the theoretical framework of Bandura (1977b) and Wenger (2002, 2008) while folding in the local, state, and national components of successful induction models that could be utilized in a distance learning format.

The methodological approach and design of the data analysis to assess the action research project impact was explained in Chapter 3. The results of the statistical quantitative analyses and qualitative data analyses were explained in Chapter 4 as they related to each research question. In Chapter 5, Findings and Discussion, I will present analytical connections of the complementarity of the mixed-methods data findings (Greene, 2007) related to specific research questions as well as discuss my assertions. The theme chart in Appendix J maps out the discussion of Chapter 5.

Research Question One (RQ1)

To what extent does a multicomponent distance learning induction program impact first year intern teachers' sense of self-efficacy in the areas of student engagement, instructional practice, and classroom management? In what ways do the intern teachers' student engagement, instructional practice, and classroom management change during the induction process?

Key assertion 1. First year intern teachers participating in a multicomponent induction program perceive themselves as being more efficacious in the areas of instructional practice and classroom management as compared to student engagement.

Complementarity of data was utilized in this mixed-methods study to address each research question as seen in the Complementarity Chart, Appendix L. Both quantitative and qualitative measurements were used to answer RQ1.

To answer the quantitative sub-question of RQ1, analysis of quantitative data from the pre- and post- Teacher's Sense of Self-Efficacy Survey indicated that there was a significant difference in the areas of instructional strategies (.015) and classroom management (.043). In the area of student engagement, a statistically significant difference was not found (0.187). These results indicate that students believe that they have a better understanding/implementation of instructional strategies and classroom management at the end of the first semester as compared to their understanding/implementation at the beginning of the semester. However, the results for student engagement tell us that there was not a significant difference; therefore a judgment on the intern teachers' beliefs of their understanding/implementation from the beginning to the end of the semester cannot be made. A more nuanced analysis of the qualitative data reveals that the issues of student engagement were a concern of the cadre leaders and interns. This was an area that interns felt they struggled (self-perceived) with and discussed strategies for student engagement.

In answering the sub-question of RQ1, analysis of qualitative data from reflective intern teachers' blogs, annotative comments, and STAI comments informed the question. Within each of these qualitative data sources, codes were identified demonstrating student engagement, instructional practice, and classroom management. Relating codes were then put together in categories. Themes were created from these categories suggesting that (Theme 1) intern teachers requested additional opportunities to build

relationships with other education professionals as they attribute their successes in the classroom to networking with their peers, (Theme 2) interns' teaching skills were positively impacted due to feedback by the cadre leader in the areas of student engagement, instructional practices, and classroom management., and (Theme 4) intern teachers made progress in the area of student engagement; however, as identified in the survey, they do not feel more efficacious in this area. Interns and cadre leaders worked on enhancing student engagement and appear to have made progress in the area of student engagement (as identified in the pre/post qualitative STAI analysis), and (Theme 5) intern teachers applied concepts taught in Black Water College courses to the K-12 classroom.

The innovation of this study focused on activities surrounding the self-efficacy survey constructs of instructional strategies, student engagement, and classroom management. The multicomponent induction program specifically focused on the discussion and implementation of these constructs through the intern teachers' participation in webinars, blogs, and Project Flips. The participation in these activities and the practical application to the classroom positively impacted the intern teachers' self-efficacy in instructional strategies and classroom management as seen in the quantitative data findings.

The quantitative and qualitative findings reveal differences in regards to student engagement. The qualitative findings show intern teachers made progress in the area of student engagement; however, as identified in the quantitative data, they did not feel more efficacious. Intern teachers were just not at a place in their teaching abilities where they felt confident in student engagement. This may be due to the attention to

instructional strategies and classroom management which dominates a new teacher's attention compared to student engagement at the beginning of the school year. Intern teachers may not have felt as efficacious in student engagement also given the timing of the post survey which fell during the disillusionment phase of a teacher's first year. It is during this phase that they have been working continuously for at least 6 to 8 weeks, are feeling stressed, and may be experiencing a rough patch in their efforts. New teachers during this time experience low morale and often find that they become ill from being worn down and exposed to various germs (Moir, 2011).

The qualitative analysis identified that interns and cadre leaders worked on engagement and appear to have made progress in the area of student engagement. The quantitative results were not a surprise to me as a researcher as student engagement is a more complex area to implement as new teachers have limited classroom experiences (Hoy & Woolfolk, 1990). Intern teachers begin the school year focus on classroom management and implementing instructional practices learned in their coursework. Webinars and Black Water coursework focuses on these two areas which also may have contributed to the interns' sense of self-efficacy in the area of classroom management and instructional practices. However, student engagement involves a higher level of skill to implement, combining classroom management and instructional practices. Veteran teachers find that student engagement is an area that they continually strive to implement successfully as it is a "more developmentally advanced task" (Tschannen-Moran & Hoy, 2007). The qualitative sources captured a greater depth of data as compared to a narrower scope collected by the quantitative data. The self-efficacy data did not reflect the cadre leaders perceived strides that they thought the interns made.

In summary, a distance learning multipcomponent induction program significantly impacted intern teachers' sense of self-efficacy in the areas of instructional practices and classroom management. The first semester intern teachers' self perception of student engagement did not display a significant difference although there is some evidence that student engagement was impacted. In the end, interns could not say that they were at an efficacious, independent implementation level with student engagement. However, cadre leaders did see an improvement in student engagement from the September/October to the November/December evaluations. Improving student engagement is an implication for programmatic change that will be discussed in more detail in Chapter 6.

Research Question Two (RQ2)

In what ways do intern teachers feel supported in a distance learning induction program?

Key assertion 2. Relationships with other educators support an intern teacher emotionally and pedagogically.

In answering RQ2, a qualitative question, analysis of data from the reflective intern teachers' blogs and video annotative comments informed this question. The (Theme 1) intern teachers requested additional opportunities to build relationships with other education professionals as they attribute their successes in the classroom to networking with their peers; Intern (Theme 2) teaching skills were positively impacted due to feedback by the cadre leader in the areas of student engagement, instructional practices and classroom management; Intern (Theme 5) teachers applied concepts taught in Black Water College courses to the K-12 classroom.

Chapter 1 discussed in detail the requirements of the intern certificate according to the Arizona State Department of Education. One such requirement is the role that others plan in the intern certification process: the mentor assigned by the school district or charter school and the supervisor from the college providing the certification coursework to the intern teacher. The district or charter school, which is the employer of the intern, is responsible for assigning a mentor teacher to the intern teacher. However, the extensiveness of this role varies by district/charter ranging from an extra duty (a few hours a week) of a classroom teacher to a full time mentor teacher whose responsibility is only to mentor new teachers. Compensation of these mentors also varies from no extra pay to a small stipend. The amount of time that each mentor spends with the intern also depends on the structure as dictated by the district/charter. Given that this mentor is an employee of the district/charter and not Black Water College, it is difficult for the college to enforce or dictate the responsibilities of these mentors, especially due to the wide range of pay, hours set aside of mentoring, and the work load of the mentor.

Thus the role of the supervisor assigned by the college becomes more crucial. The other role of support required by the Arizona Department of Education is the supervisor from the college providing the teacher certification coursework. Black Water College employs a cadre leader who is responsible for the classroom supervision and facilitation of the induction program. The Cadre leader is a paid position in which Black Water College does outline the specific duties and responsibilities for in working with the intern teacher. Former Superintendent of Instruction Tom Horne realized early on in the development of the intern certificate that the intern position would require a more

“systematic approach that makes sure teachers get intensive mentoring from experienced teachers” (Kossan, 2004).

As this second key assertion and the qualitative data in Chapter 4 suggest, there are many other education professionals that contribute to the emotional and pedagogical support of the intern teacher. Ellen Moir, Founder and Chief Executive Officer of the New Teacher Center, currently leads a national initiative to support beginning teachers through induction best practices through the New Teacher Center. She recognizes that new teachers start the school year with a steep learning curve compared to that of their veteran counterparts (Moir, 2009). The importance of this support is demonstrated through this intern teacher statement, “I have a wonderful mentor that meets with me on a weekly basis and she has walked me through many of my challenges with expert advice.” The intern teachers within this study found that tapping into those veteran teachers who have spent years mastering their craft is a beneficial resource. These veteran teachers can be those at the intern teacher’s same grade level or content area, or those that teach other grade levels, content areas, or even at different schools.

Ingersoll and Smith (2003) found in their research that induction programs help to support those who felt inadequately prepared and have significantly impacted a first-year teacher’s decision to abandon or continue in a teaching career. Induction program structures allow for the greatly needed time to dialog about current practices, experiences, and situations that are happening in the classroom. Hunt (1968) described the much needed conversations to “bridge between the theory of the teacher training institutions and the reality of the everyday classroom situation...”. Bandura’s social learning theory (1977b) and Wenger’s communities of practice concept (2008) included meaning (talking

about our experiences and abilities), practice (shared views of action), community (the action of talking and participating), and identity (discussion of how learning changes), all of which support the need to develop relationships with other education professionals to improve classroom practices.

Concluding key assertion 2, Ingersoll and Smith's research in 2004 stated that the strongest impact on beginning teachers came from a mentor from the same field, common planning time with other teachers, and networking with teachers outside of their own school or district. The qualitative findings of this research study are in alignment with Ingersoll and Smith's (2004) findings of which relationships with other educators support an intern teacher emotionally and pedagogically. Chapter 6 will discuss future implications for the induction structure to encourage discussions and networking with education professionals to improve classroom practices.

Research Question Three (RQ3)

How do intern teachers struggle in their first year of teaching?

Key assertion 3. Intern teachers struggle with work-life balance.

In answering RQ3, a qualitative question, analysis of data from the reflective intern teachers' blogs, video annotation comments, and STAI comments informed this question. Theme 3, intern teachers identified struggles during the intern program specifically informed this question. Theme 3 was constructed from the qualitative categories of Intern Personal Feelings, and Well-Being, Classroom Management, Technology Practice Impacting the Classroom.

In Chapter 1, I discussed the anecdotal reasons that intern teachers did not complete the intern program. Non-completion was a programmatic issue that I had

identified and considered when building support in the induction program. I identified reasons for non-completion of the intern program through prior anecdotal conversations with intern teachers, intern program staff members, and college supervisors (cadre leaders); these include:

- Interns were placed on an improvement plan by the school site. Intern teachers chose to leave a position after being placed on an improvement plan, or the school site let the teacher go for not meeting the demands of the improvement plan.
- Intern teachers did not complete required coursework.
- Intern teachers experienced personal issues regarding health/finances/out-of-state relocation.
- Intern teachers chose to leave the profession.

I have observed that in some school districts/charters, the human resources director is the one who hires and places the intern in a specific school while other educational stakeholders, such as principals and instructional coaches, have little understanding as to the background of the intern teacher. This is evidenced in this example:

The biggest challenge is the expectations of my school feeling like I should know everything and they shouldn't have to help mentor me through anything...The school has not offered any kind of help or support, even when I went to them and asked for it, it was viewed as a disrespect to them...They felt I should have been ready to teach without any help or support.

The principal and other educational stakeholders may not understand the background or have the buy-in necessary for supporting the intern teacher during his/her first years in the classroom. It may be that the intern was hired because at the time it was a “last

resort” as a certified teacher could not be found and true buy-in for the support necessary for an intern teacher was not held (Feistritz & Chester, 2003). These interns, as discussed in key assertion 2, have a tough learning curve and experience ups and downs in their teaching experiences. Without the understanding of the intern program or buy-in of the principal, the intern teacher may find that he/she has been placed on an improvement plan causing an imbalance in his/her work-life balance. Intern teachers in such situations may find that they feel defeated and instead of persisting through a situation, they may decide to leave the position altogether. Research has stated that as many as 25% of first year teachers decided to leave the teaching profession in the first year while 50% leave within the first 5 years (Ingersoll & Smith, 2004; Moir, 2009). These teachers do not persist beyond the first year in part due to their lack of confidence in the new teacher by administration or not being given enough time to demonstrate improvement in teaching practices according to the improvement plan.

The qualitative data revealed much discussion in the intern teachers’ blogs regarding the stresses they were encountering and how these stresses impacted the classroom and their personal lives resulting in an upset of their work-life balance. The work-life balance issue can be seen in the percentages of intern teachers who fail to complete the required coursework within the Black Water College coursework. Intern teachers are provided a unique opportunity in that they are being paid full first year teacher salary while completing their certification courses. Given this unique opportunity, it is not unrealistic that there is a more focused and elevated expectation for the interns. The certification coursework, for the most part, demands the same expectations and work load as students in a traditional program who are not in the

classroom concurrently. Several intern teachers stated that they felt that the expectations should be less than traditional programs since they are in the classroom full time which should count for something. According to Peterson and Nadler (2009), the researchers found within their study that teacher candidates rarely completed an alternative certification program if the requirements are similar to that of a traditional certification program with demands not being considered for their prior experiences, full-time teaching schedule, and re-careering adult complexities such as age, families, and possible health issues. Programs that purposely created curriculum with these complexities allowed students to gain knowledge through means other than traditional college coursework demonstrated a higher percentage of program completers (Peterson & Nadler, 2009). This research informed the innovation in this study early on as interns received two credit hours for their induction program as an alternative to completing the traditional programs in-person requirement of attending Master Teacher Seminars. The categories utilized to create the theme (Theme 3) of intern teachers identified struggles during the intern program, demonstrated many instances of intern teachers describing the work-life balance of which completing certificate coursework was a struggle. In Chapter 6, I will discuss program modifications that could keep the same intense focus as traditional programs yet take into account their experiences in the K-12 classroom.

In the qualitative analysis to create the theme (3) of intern teachers identified struggles during the intern program, interns discussed work-life balance in the areas of personal issues regarding health and finances. As a post baccalaureate student, interns come to the program with the benefits of having more life experiences and maturity than a traditional baccalaureate student; however they also bring with them possible additional

personal issues in regards to health and finances (Dill & Stafford, 1996; Peterson & Nadler, 2009). These issues make the work-life balance issues even more of a struggle.

Persistence according to Dr. Martin Haberman (2004) goes beyond just simple “stick-to-itiveness” but also demonstrates creativity, problem solving, and commitment. As seen in the intern quotes in Chapter 4, some interns demonstrated persistence through their optimism. While interns faced challenges within their K-12 work and/or within their personal life, those seemingly with the teacher characteristic of persistence were able to push through the work-life challenges even if they were imbalanced.

Anecdotally, the staff and cadre leaders noticed students who struggled and lacked persistence chose to leave the profession. This decision often came when work-life imbalance existed. This was a heavy decision for most interns as they saw leaving the profession as a failure, something that they are not proud of especially when they may have been re-careering from previous professions where they had been successful for many years.

To conclude key assertion 3, interns struggle in the classroom in many different ways however, each struggle leads to the work-life imbalance. One great benefit as described earlier in this chapter is the acceleration to the K-12 classroom but the demands of the program become evident as described by this intern:

The demands are great between being a new teacher and being an intern - planning lessons and curriculum and finishing assignments and observations. I was often stressed to the point of not enjoying my job, my home life, or anything else, which I am sure translated to students in the classroom. I know the stress was evident to my family.

Intern teachers explained that when they are struggling in the classroom and/or are placed on an improvement plan, the stress that comes from this throws off the work-life balance.

If an intern falls behind or struggles with teacher certification coursework, again, the work-life balance is off also. Through my program exit discussions with intern teachers, I anecdotally noted that issues with health and finances also contribute to the imbalanced work-life issue contributing to intern teachers leaving the profession if they lack the characteristic of persistence.

To bring to a close the discussion of RQ3 regarding how intern teachers struggle in their first year of teaching as specifically seen in their struggle with work-life balance, a plethora of intern quotes and examples have been analyzed. The intern certificate brings with it a great opportunity to obtain access to the K-12 classroom sooner and accelerates the timeframe for when one could begin collecting a first year teacher salary and benefits, yet the benefits are countered with struggles. The act of balancing all that comes with the intern position along with a personal life can become imbalanced at any time. Possessing the characteristic of persistence can lead to continuing or leaving the intern program. Chapter 6 will discuss the implications for further studies and programmatic impact by suggesting additional innovations to give intern teachers a bigger pedagogical push before entering the K-12 classroom.

Research Question Four (RQ4)

How do the intern teacher evaluations on the Student Teaching Assessment Instrument (STAI) in the areas of student engagement, instructional practices, and classroom management change from the September/October observation to the November/December observation? What were the findings of the cadre leader in regards to the intern teachers' performance?

Key assertion 4. Cadre leaders observed intern teachers as having improved their skills in student engagement, instructional practices, and classroom management.

In answering the quantitative sub-question of RQ4, [*How do the Intern teacher evaluations on the Student Teaching Assessment Instrument (STAI) in the areas of student engagement, instructional practices, and classroom management change from the September/October observation to the November/December observation?*] analysis of quantitative data from the STAI was necessary. The results indicate that there was a significant difference in all three constructs. A significant difference was found of .000 in the area of student engagement, .006 in instructional strategies, and .011 in classroom management.

RQ4 has a sub-question that is qualitative [*What were the findings of the cadre leader in regards to the intern teachers' performance?*]. The qualitative analysis of data from the STAI narrative comments informed this question. The themes (Theme 2) intern teaching skills were positively impacted due to feedback by the cadre leader in the areas of student engagement, instructional practices ,and classroom management and (Theme 4) intern teachers made progress in the area of student engagement; however, as identified in the survey, they do not feel more efficacious in this area. Interns and cadre leaders worked on engagement and appear to have made progress in the area of student engagement (as identified in the pre/post qualitative STAI analysis).

The data findings, both quantitative and qualitative, demonstrate that intern students display growth from the September/October to the November/December observation evaluations. The majority of the interns have not taught previously and have taken little prior pedagogical coursework. In addition to little experience or pedagogical

knowledge, these beginning intern teachers were often left to deliver the most difficult content courses (math, science, special education) to students in high needs areas (due to location and/or poverty, Darling-Hammond, 2000; Hunt, 1968; Moir, 2009). Given these circumstances, it is not unexpected that the September/October observation evaluation demonstrates a need for improvement. As the intern teacher completes teacher certification coursework, participates in induction activities, and receives feedback from education professionals, the intern teacher finds that this either breaks them (key assertion 3) or makes them. This improvement in student engagement, instructional practices, and classroom management is seen in the November/December observation evaluations.

In answering the qualitative sub-question, *What were the findings of the cadre leader in regards to the intern teachers' performance*, the corresponding themes of (Theme 2) intern teaching skills were positively impacted due to feedback by the cadre leader in the areas of student engagement, instructional practices, and classroom management and (Theme 4) intern teachers made progress in the area of student engagement; however, as identified in the survey, they do not feel more efficacious in this area. Interns and cadre leaders worked on engagement and appear to have made progress in the area of student engagement (as identified in the pre/post qualitative STAI analysis). Darling-Hammond (2000) stated "...many people believe that anyone can teach, or, at least, that knowing a subject is enough to allow one to teach it well" (p. 167) which is positive to note as intern teachers come into the program with knowing their content area as demonstrated through 24 college credit hours or passage of state teacher exams in the specific content area. However, Darling-Hammond goes on to describe that

the research literature from the last 30 years has concluded that teachers who have been fully prepared in a teacher preparation program out-perform those teachers who have not been formally prepared. Knowing the content area is not enough. Through the combination of content knowledge and teacher preparation coursework, growth is demonstrated on the evaluation instrument utilized in this study. This growth is noted in the quantitative and qualitative realms. The qualitative findings on the evaluation instrument demonstrate that cadre leaders specifically provide feedback to improve teaching in the areas of student engagement, instructional strategies, and classroom management.

In conclusion of key assertion 4, both quantitative and qualitative data findings demonstrate the improvements in their skills in student engagement, instructional practices, and classroom management. When many intern teachers begin the intern program, their level of teaching skills is low. Interns lack pedagogical knowledge prior to entering the classroom yet they possess the content knowledge of the area that they are teaching in as demonstrated by passing content area exams or a minimum of 24 credit hours on transcripts. As the semester goes on, the intern teacher participates in various activities to gain the pedagogical knowledge through induction activities, certification coursework, and feedback from cadre leaders. These activities increase the interns' teaching skills. In chapter 6, I will discuss the implications for programmatic improvement revolving around the need to accelerate the time for effectiveness in pedagogical practices.

Summary

In this chapter, Findings, I presented the analytical connections of the complementarity of the mixed-methods data findings (Greene, 2007) related to specific research questions as well as discuss my assertions. In addition to the correlation of the quantitative and qualitative findings as they pertain to the research questions within this study, assertions were formed. Each assertion was supported by the research and current literature by experts in the field.

The findings and discussions informed the impact for my innovation of supporting first year alternatively certified urban and rural intern teachers through a multicomponent distance induction program to solve the real workplace issues that were happening. These findings and discussions lead us to the final chapter, Chapter 6, to discuss the implications for improvement in the Resident Teacher program at Black Water College and the possibilities for future studies. Chapter 6 will also look at my development of skills and leadership within the innovation process.

Chapter 6

Conclusion

When embarking on this action research journey, I knew only of the issues and struggles that were experienced by my interns, my staff, and myself. On a daily basis, we lived with the anecdotal problems which surrounded us. As a practitioner in my field, I knew that there had to be a better way to address the issues and struggles yet I didn't have the data, literature, and knowledge to implement a strategic solution. It was through this action research study that a plan was implemented and studied to support first year alternatively certified urban and rural intern teachers through a multicomponent distance induction program.

Within RQ1 of this study, I learned from the quantitative data that a multicomponent distance learning induction program impacted intern teachers' sense of self-efficacy in the areas of instructional practice and classroom management. However, no significant difference was determined within student engagement. The qualitative data demonstrated intern teachers' self-perceived efficacious improvement in all three areas. The improvement was often attributed to their successes in the classroom which was assisted by the networking with peers (Theme 1). Intern teaching skills were positively impacted due to feedback by the cadre leader in the areas of student engagement, instructional practices, and classroom management (Theme 2). The intern teachers made progress in the area of student engagement; however, as identified in the survey, they did not feel more efficacious in this area. Interns and cadre leaders worked on engagement and appeared to have made progress in the area of student engagement as identified in the pre/post qualitative STAI analysis (Theme 4). The intern teachers then

applied concepts taught in Black Water College courses to the K-12 classroom (Theme 5).

In answering RQ2, interns felt supported in a distance learning induction program through their relationships with other educators who supported them both emotionally and pedagogically (Theme 1). Interns also felt supported through the feedback they received (Theme 2) and through the application of the concepts taught at Black Water College (Theme 5). Without the support of Black Water College, their career success would not have been possible (Theme 6).

In answering RQ3, the intern teachers felt that they struggled in the area of work-life balance. The intern teachers identified struggles during the program (Theme 3); nevertheless successful intern teachers persisted through these struggles.

The quantitative findings revealed that intern teachers' evaluations on the Student Teaching Assessment Instrument (STAI) in the areas of student engagement, instructional practices, and classroom management improved significantly from the September/October observation to the November/December observation. The qualitative findings of the cadre leader in regards to the intern teachers' performance also demonstrated improvement. The intern teachers received feedback from the cadre leader in the area of student engagement, instructional practices, and classroom management to impact intern learning (Theme 2) and made progress in the area of student engagement; however, as identified in the survey, they did not feel more efficacious in this area. Interns and cadre leaders worked on engagement and appear to have made progress in the area of student engagement (Theme 4).

Limitations of the Study

As with any study, there were limitations in the data that must be addressed. The return rate of surveys was lower than expected. Unfortunately, there was a lot of time and energy put into obtaining signed permissions for using interns' data for this study. Beginning in September, email communication was sent out to the first semester interns via their Black Water College email. This resulted in few signed permissions. In October, permissions were sent to the interns' Black Water College email and their personal email addresses, again with few results. A plea was sent to the cadre leaders in November/December asking that they discuss with the interns the importance of returning the signed permissions. Some of the cadre leaders brought the study permission slips to the second evaluation which did produce some signed permissions. The last effort was in February when I personally mailed 99 cover letters, permission slips, and self-addressed stamped envelopes to the remaining interns who had not returned their permission slip. I offered in the cover letter to provide a raffle of 2 restaurant gift certificates to those returning their signed permission slips by March 30. This produced a few more permission slips. After these attempts, a total of 75 out of 123 (60.98%) potential study participants gave permission to use their data in this study. A total of 39.02% did not respond. This response rate is a limitation as the participants' data could not be equally considered in the analysis. The higher the response rate, the risk of sampling errors decreases (Coughian, Cronin, & Ryan, 2007). Ideally, a 100% return rate would ensure that all populations within the study were represented. Although a 100% return rate was not achieved, according to Polit and Beck (2006), a sample size of at least 50% who participated in the study is appropriate to avoid sample bias.

An additional limitation was in regards to the Teachers' Sense of Self-Efficacy (TSOSE) survey which was a pre/post type survey. Missing surveys as well as those for which permission to use was not granted were removed from the data analysis. In the end, a total of 29 out of 75 useable survey responses were utilized (38.67%), just under the acceptable response rate guideline. The guideline for acceptable survey responses is a debatable topic as experts argue over acceptable rates and within methodologies of acceptance--email surveys versus U.S. Postal Service surveys. Email surveys, which were used in this study, typically have an acceptable response rate guideline of 40% average, 50% good, and 60% very good (Sheehan, 2001). Responses rates allow for the comparable judging of quality data. A low response rate may lead to sampling bias as the sampling of survey responses may not equally represent the targeted population. In the case of this study, the response rate is a limitation as it may only reflect those participants who are persisting through the program as other interns would not take the time to complete the survey. The survey response data may not accurately reflect those who are struggling to a greater degree as compared to others within the program.

To understand the disappointing response rates, I had emailed four and phoned three of the same students asking for feedback as to the reasons why the survey responses were not returned. One of the intern's contact information was no longer valid and I left two voicemail messages for the other interns. Only one returned my response via email explaining that she felt she could just not take on one more task given all of the other demands from the college and her K-12 school. Her reason is consistent with my findings regarding work-life imbalances.

In hindsight, I would suggest that when completing a study with interns in a distance learning setting, that permission for use of data in a study is included in the initial intake application when obtaining the intern certificate at the onset of the program. It seems that after the intern certificate is issued and their school year begins, it is more difficult to obtain items from the interns due to their schedules and demands. In regards to the TSOSE survey, I suggest that this become an assignment in the introductory course which all interns are required to complete for points toward a final grade. It would become a normal component of the induction program for purposes of improvement. If it did not become a standard program component, then another option would be to offer bigger incentives for completion of the survey such as offering bookstore incentives or free tuition.

Implications for Practice

The implementation of this study's innovation components and the data findings is of future benefit to my educational organization and future interns who enroll in Black Water Colleges Resident Teacher Program. These benefits include enhancing the focus on student engagement, accelerating basic instructional strategies prior to being in the classroom with students, screening intern applicants for effective teaching characteristics, modifying the induction structure to be more manageable, yet just as effective for new intern teachers, and finally revising current curriculum to address additional intern needs. Each of these suggestions will be further explored as they relate to the implications for practice within Black Water College.

Student engagement. The results from this study identified student engagement as an area to which even greater attention should be given. Key assertion 1 describes

how intern teachers were more efficacious in this area, but not as great compared to the areas of classroom management and instructional practices. For future cadre groups going through the first semester induction program, based on the findings I suggest that a more structured approach for student engagement activities be carried out. This can be done through adding a specific webinar(s) on the topic asking students to define, identify, and implement very specific activities to enhance student engagement. One of the ways to help students identify student engagement strategies would be through their required field experience observation hours completed in the Classroom Management course. During the later webinars in the first semester, students could be asked to share ways that mentor teachers had engaged students. Through these improved practices, interns will hopefully progress to become as efficacious as classroom management and student engagement.

Modeling of best practices. Another way to identify student engagement strategies would be through the creation of a best practices library created from the Project Flip videos uploaded by previous semester students going through the induction program. Cadre leaders will be asked for the names and titles of Project Flips from previous interns to strengthen different categories such as “student engagement, classroom management, instructional strategies, Structure English Immersion Strategies”, etc. Model video examples would provide concrete visual examples to assist in improving intern teachers’ skills in student engagement, instructional practices, and classroom management (key assertion 4). While intern teachers improved in each of these areas, providing visual examples specifically of what each area looks and sounds

like will provide for additional opportunities for discussion with the hopes that they will feel more efficacious.

Super Saturday sessions. Although Black Water College's program helped interns to succeed in the classroom over the two-year period, discussion of placing a component prior to the first day in the K-12 classroom may be something to consider in the future. Since many interns come to the intern program with little to no pedagogical training, it has been identified in the findings that waiting until either the induction or coursework begins is too late as the intern has already begun classroom teaching. Intern teachers need guidance prior to the first day with students otherwise they feel unprepared and unsuccessful from the first day leading to a struggle impacting the work-life balance. If the classroom is not going well, it impacts what is going on at home. Interns noticed this need themselves in comments such as, "I would have read Fred Jones (EDU276 Classroom Management) BEFORE the start of the school year and gotten my procedures in order!!" It is important to acknowledge the finding for the need of increasing teaching skills prior to the intern teacher's first day in the K-12 classroom. Currently, over the course of two years, Black Water College increases teaching knowledge and skills through coursework. However, the slow build-up of these skills needs to be accelerated for even earlier and greater success. One idea for acceleration would be through the use of a "Super Saturday" virtual conference. Attendees, new intern teachers, could attend webinars on various topics needed to start their first days in the classroom off on the right foot. Topics could include classroom organization, setting up a classroom management system, curriculum maps, instructional lesson planning, and student engagement. This would help to address the struggles with work-life balance (key assertion 3).

Pre-screening assessment. A further strategy for impacting the work-life balance would be to ensure that those on intern certificates have been screened for success characteristics such as “persistence” (Haberman, 2004). This quality was addressed in key assertion 3 in that if an intern teacher possessed the characteristic of persistence then when faced with work-life obstacles they would approach tasks with optimism. The intern teacher finds the way to push through in a positive manner. Theme 3 of struggling with work-life balance was extremely evident within the intern teacher’s blogs. Given this, by having a tool that could identify characteristics that would enable success within the program would be used to help off set the struggles in the program. Haberman’s Star Teacher Pre-screener (2004) is one that K-12 institutions around the nation use as a tool to select potential teachers for hire. The Star Teacher Pre-screener identifies the characteristics that a potential teacher may or may not have. The results from the pre-screener gives insight into whether the potential candidate would/would not make for a quality teacher intern candidate. As a pre-screening tool for the Resident Teacher at Black Water College, it would give staff an insight to strengths and weaknesses in the areas assessed within this tool. I do not see its use as a mechanism to keep potential interns out of the program, but a tool for staff/cadre leaders to use in working, mentoring, and coaching the intern during their two-year program. Prior to the implementation of this tool, I will review the research involving this pre-screener and if promising, I would use it as one tool to help inform the identification, selection, and coaching of intern teachers.

Induction structure. The overall original structure of the multicomponent distance induction program created for this study is a solid one. It provided intern

students an opportunity to network and build a community of practice of like content area interns who were experiencing much of the same as their cadre group members. Through the relationships with other cadre members and cadre leader, the intern teacher was supported both emotionally and pedagogically (key assertion 2). In the past, there had not been a rigorous accountability structure that would require cadre leaders and interns to come together through a mandatory set of activities specifically designed to support the intern. However, some interns stated, “I think the most challenging aspect of the TIR program has been trying to fit in my schedule the two weeks of four days of webinars...” The frequency of the initial week 1 and 2 webinars (4 times a week) proved to be too intense in the initial startup. As the induction program is now in its fourth semester, the frequency of webinars in the first two weeks has been lessened to one session each week which has proven to be more palatable. The webinars were condensed into longer sessions occurring less frequently by combining related topics such as classroom management and communication. Nineteen sessions were ultimately pared down to twelve sessions conducted once a week.

Within action research, it is necessary to be aware of the current practices and the changing field around them. In a year since this study was conducted, I have learned much more about Common Core Standards (CCSS). At a recent Arizona Department of Education training on CSSs, I began to realize the importance of cross-curricular planning and instruction for the implementation of these standards.

Another related induction program structure change deals with the content grouping of the cadre groups. Based on the data from this study, I believe that the content area matched groups were important for the first year in the intern program. It

allowed interns to gain content area specific instructional techniques and strategies. However, after attending the CCSs training, I quickly realized that the cadre groups encouraged content area silos which prohibited the richness of cross-curricular planning that CCSs requires. I propose for the second year of the program that the cadre groups are mixed consisting of a single content area person for each of the disciplines. This cross-curricular grouping in the second year would still allow for the emotional support of interns who are at the same point in their programs to share in common discussions. In an effort to encourage cross-curricular areas to plan and create instruction collaboratively, this grouping structure would provide this opportunity.

Curricular revisions. A final area for consideration for implications of practice is the revision of existing curriculum within courses to include additional topics with which intern teachers need assistance. It was through the analysis of the intern blogs that it became evident that the cadre groups supported the interns pedagogically in addition to the college coursework (key assertion 2). However, in this same analysis, curricular gaps were mentioned. These curricular gaps can be addressed through systematic curriculum updates. When Black Water College first created the teacher certification courses approximately ten years ago, local school districts were interviewed and asked what are the needs of the teachers within those districts. Through the interviews, a comprehensive list of topics was addressed within the courses.

Hearing from the intern teachers is an important aspect in keeping the program current to the needs of the field. As one intern states:

However, if Black Water College could have offered a course on teaching in low income areas or a course around the book *Teaching with Poverty in Mind* (Jensen, 2009), I could have been more prepared, and I think there are a lot of public schools that could benefit in Arizona if not most. Having students who walk in at 9 o'clock every day, parents that don't come to conferences, children who are malnourished or fearful of CPS, major behavior problems relating to respect, self-worth, and so many other things came as a shock to me and have presented challenge upon challenge.

Feedback from the field on the real world teaching challenges that are being experienced is something that Black Water College does not take lightly. When shared with the Black Water College Operations Team, the decision was made to make poverty a curriculum initiative. Since there has been a bit of controversy published surrounding Ruby Payne's, *Understanding a Framework for Poverty* (2005), I will convene a study group of cadre leaders to consider this book for inclusion in the program. This book could be implemented into the first course that students take upon entering the intern program. Discussions around this book could also take place within the first semester webinars as well increasing the instructional strategies that intern teacher have in their tool belt to use with children from poverty.

Recommendations for Those Working with Interns

From the beginning of this study, the issue of interns who did not complete their intern programs was noted but it was clearly stated that it was not a specific focus of this study; therefore non-completion was not referenced in the research questions. However, through the research questions a recommended list for various stakeholders involved in the interns' success was evident. Suggestions for the intern student, their principal, and

for human resource directors have been compiled in Table 12. These suggestions come from the findings of this study through the responses interns provided in blogs/Wistia and literature analysis of working with new teachers. Other ideas are common sense approaches to managing work-life challenges, such as delegating certain personal tasks and exercising/eating right. Analysis of student data pointed to a problem, and I brainstormed solutions to meet the problems that involved actions on the part of the principals and the human resource directors. This table of suggestions will be utilized by Black Water College when speaking with new interns as they enter the program and when educating principals and human resource directors about the overall intern program.

Table 13

Recommendations for Resident Teacher Program Stakeholders

Student	Principal	Human Resources
<ul style="list-style-type: none"> - Delegate family responsibilities such as laundry, yard work, and picking up children after school. - Delegate or turn down personal commitments such as being a scout leader, Sunday school teaching, and homeowners association representative. - Do not take on extra responsibilities such as coaching. - Set goals for college courses and K-12 classroom items. - Network with other educational professionals from college and K-12 school. - Eat right. - Find a stress outlet such as exercise, or pleasure reading. - Do a little coursework every day. - Use time wisely. - Take sick days when you are sick. - Give yourself a break. - Know where you stand with college course work and evaluations. - Know where you stand with K-12 school evaluations. - Celebrate and reward yourself for successes and milestones. 	<ul style="list-style-type: none"> - Assign quality mentors to intern teachers. - Allow common planning time between mentor and intern. - Do not allow intern to take on extra positions such as coaching. - Do not give intern extra responsibilities such as: <ul style="list-style-type: none"> o Committees o Before/after-school duties o Overload class size o Large IEP caseloads - Establish environment for ongoing support and encouragement. - Set realistic expectations for the intern. - Meet quarterly with intern to check-in on progress and overall well-being. - Acknowledge when things are going well. - Setup an evaluation process that allows for forgiveness and allow demonstration of growth. - Check in with college to discuss intern's progress on coursework and K-12 classroom performance. 	<ul style="list-style-type: none"> - Gain buy-in from principal, department directors, other teachers for hiring and supporting the intern teacher. - Hire intern and notify of placement at least 3-5 days prior to being with students. - Do not assign extra duties such as coaching. - Remind intern of certification deadlines. - Screen applicants for effective teacher characteristics and not just hiring of a "warm body". - Check in with college to discuss intern's progress on coursework and K-12 classroom performance

Implications for Research: Possible Future Action Research Studies

Through the findings of the research questions in this study, many implications to the program were identified. There are suggestions for what I would change if I conducted this research again and other suggestions are for how to further the work of this action research cycle.

If I were to conduct this research again, I would obtain permission from the intern teachers when they initially applied for the program. The study permission would be a part of the application process due to the amount of time that was spent in tracking down the participants to sign the study permission. It was much more difficult to contact the interns and receive anything back from them once the coursework and school year began.

Another way that I would consider changing is in terms of staff, staff responsibilities, and hours. Knowing the depth of each of the components now, I would have spent more time on the front end estimating the time requirements for learning, training, and implementing. Delegation of each of the induction components could have been implemented if staff had hours available. I would have been more assertive on the staff hours needed in order to support the program as designed.

As program modifications are introduced as a part of this study, new research questions came to mind for possible future investigation. One such question would be to identify if utilizing a pre-screener at the college level would benefit the program outcomes. Utilizing a pre-screener instrument at the college level would help to identify if potential interns have specific characteristics such as persistence to be successful in the program instead of leaving the selection process solely to the school districts or charter schools. Further study comparing a control group consisting of interns who were

selected from the screener tool as having the characteristics for being a successful classroom teacher, to a group that was not screened would be beneficial. The groups could progress through the intern program and their higher completion rates compared. The results from such a study would help to identify if a screener for effective teacher qualities contributes to effective classroom teaching and persistence in program completion. The results would then inform if the program could be selective in the applicants qualifying for the program.

Finally, I would like to further the findings of this study by exploring the issue of non-completion rates. I tried to make it clear throughout this study that program non-completion was not addressed purposely in the research questions. This study took the first step into the bigger picture of the intern teacher. Before non-completion could be addressed, I needed initial data to identify an intern teacher's sense of self-efficacy, their successes, their struggles, and observation data results. A more narrowed and specific look, building on the initial innovation, can now be further explored as to the effectiveness of the individual induction support structures, characteristics of successful program completers, and the individual actions of cadre leaders that contribute to program completion. The cycles of action research are limitless.

Personal Growth as a Leader

During this study, I often reflected on my personal skills as a leader. From the beginning, I knew I was taking on a huge innovation with a large number of indirect (19 cadre leaders) and direct (123 potential intern) study participants. While the initial undertaking of the innovation research and design was solely my initiative, I found very quickly that to make this program sustainable, I would need to rely on the help of others.

I become more assertive in identifying and speaking to the needs of the program. Prior to the study, I was unable to thoughtfully articulate the challenges and possible solutions. I only had a theory for why certain phenomena were happening. As a result of this experience, I am more likely to use research to make data-driven decisions. I now look closer at different tools and instruments such as the Star Teacher Pre-screener to identify how data collected would inform program structures, procedures, and policies. It is evident that through this experience I have grown as a researcher and a leader.

As a leader, I acknowledged a gap within the organization in that I was able to identify those that I could delegate tasks to assist me, yet their hours were already taken by other programmatic initiatives and responsibilities. At the time of the implementation of this study, I had 5 team members who served on my instructional team.

1 Elementary Liaison = 20 hours a week

1 Special Education Liaison = 20 hours a week

1 Arts/Endorsement Liaison = 20 hours a week

1 Early Childhood Liaison = 10 hours a week

1 Secondary Liaison = 10 hours a week

As the innovation components were identified and rolled out, I found that I had to delegate responsibilities to the instructional team members. This delegation of responsibilities along with an increase of their skills and being able to take on more of the workload, would mean that additional hours would need to be added to their positions. Fortunately, Black Water College saw this same need and agreed that this investment in personnel would benefit the students as well as the college. The positions and duties increased as demonstrated in Table 13. The positions had also been paid out of grant

funds and with the addition of hours, the positions were made permanent, Governing Board Approved positions with benefits.

Table 14

Increase of Hours and Responsibilities of Team to Support the Intern and Induction Process

Position	Hours	Responsibilities to the Induction Program
Elementary Liaison	Increased from 20 to 40 hours per week	TaskStream Component with Lesson Planning (seen in webinars)
Special Education Liaison	Increased from 20 to 40 hours per week	Wistia Video Annotation Training, Setup, and Problem Solving
Arts/Endorsement Liaison	Increased from 20 to 40 hours per week	Elluminate Training, and Problem Solving (Webinars)
Early Childhood Liaison	Increased from 10 to 20 hours per week	Mileage for Cadre Leaders Training, Communication, Acceptance
Secondary Liaison	Increased from 10 to 20 hours per week	Epsilen/Google Training, Setup, and Problem Solving (Moved blogs from Epsilen to Google Sites)

Final Thoughts

While any task worth taking on will come with its own set of successes and challenges, it is our social learning habits that help us to overcome the challenges and celebrate the successes. The theoretical framework design of the induction components based on Wenger's (2002, 2008) communities of practice and Bandura's (1977b) social learning theory was one that resonated with me. When searching for a doctoral program

that best fit my needs, it was the draw of scholarly discussions with students and faculty that first attracted me to the Education Doctoral (Ed.D.) program. The Leader Scholar Community (LSC) model of the Ed.D. provided an opportunity to discuss with my peers similar successes and challenges that they were experiencing as well. As I reflect on my 4 years of learning, conversations, and growth as a practitioner/leader/researcher, I know that it was not only the intern teachers within my study that benefited but also the future interns as well as myself. It is through action research that my interns have grown; I have grown and will continue to challenge myself through additional future action research cycles.

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APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVALS

 You replied on 8/8/2011 11:59 AM.

Jennifer Gresko (Faculty)

From: angela.felix@riomail.maricopa.edu [angela.felix@riomail.maricopa.edu] **Sent:** Mon 8/8/2011 11:56 AM
To: Jennifer Gresko (Faculty)
Cc:
Subject: IRB Protocol Approved: 2011-07-142, Gresko, Jennifer
Attachments:

IRB has approved the protocol with the following details.

Protocol ID: 2011-07-142
Principal Investigator: Gresko, Jennifer
Department: Education
Protocol Title: Supporting First Year Alternatively Certified Urban and Rural Intern Teachers through a Multicomponent Distance Induction Program
Review Type: EXEMPT
Approval Date: August 08, 2011

Office of Research Integrity and Assurance

To: Keith Wetzel
FAB

 **From:** Mark Roosa, Chair 
Soc Beh IRB

Date: 08/11/2011

Committee Action: Exemption Granted

IRB Action Date: 08/11/2011

IRB Protocol #: 1108006731

Study Title: Supporting First Year Alternately Certified Urban and Rural Intern Teachers through a Multicomponent Distance Induction Program

The above-referenced protocol is considered exempt after review by the Institutional Review Board pursuant to Federal regulations, 45 CFR Part 46.101(b)(1).

This part of the federal regulations requires that the information be recorded by investigators in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. It is necessary that the information obtained not be such that if disclosed outside the research, it could reasonably place the subjects at risk of criminal or civil liability, or be damaging to the subjects' financial standing, employability, or reputation.

You should retain a copy of this letter for your records.

APPENDIX B

REQUEST FOR RELEASE OF DATA

Arizona Department of Education

RELEASE/RECEIPT FOR DATA EXTRACT OR RELEASE

Directions: Please complete all portions of this form. The completed form must be retained as a permanent record.

Section A: Requestor Information

Date of Request: 4/16/2011

Name and Title: Jennifer Gresko, Director Teacher Education Rio Salado College

Address: 21732 N 86th Lane, Peoria AZ 85382

Email Address: Jennifer.Gresko@mail.riosalado.edu

Phone Number: 623 466 3329 **Fax Number:** 480-377-4713

Section B: Please check what type of data user you are:

☐ Internal ADE Employee

☒ External User

Section C: Check the following fields that apply regarding the data request

☒ Data will be published

☐ Data resides on ADE Public Website

☒ New Report Request

☐ Data is reported to FEDS

☐ Data Warehouse User (Section E)

☐ Other

☐ Data is for Promotional Purpose

☐ Authorized to receive Educational Data

☒ ADE collects the Data

☐ Data is Student Level (Section G&I)

☐ Data is Confidential (Section G&I)

☐ Raw Data

Section D: Precise Description of the Data Requested, and its Intended Use:

Full description of data request (include attachment if necessary):

2001-02 to 2009-10 Emergency & Intern certificates issued per fiscal year July 1 - June 30th
See attached.

Intended use for data:

ASU dissertation on supporting alternatively certified teachers in Arizona

Which Fiscal Year or Reported Year?:

2001-02 to 2009-10

Due Date:

ASAP

Level of Aggregation:

☐ Raw Data/Student Level

☐ School Level

☐ LEA Level

☒ SEA-Level

Type of Aggregation:

☐ Grade

☐ Ethnicity

☐ Gender

☐ SPED

☐ ELL

☐ Other Support Programs

☐ Assessment

☒ Other (Please Describe): certificate area

Arizona Department of Education

RELEASE/RECEIPT FOR DATA EXTRACT OR RELEASE

Directions: Please complete all portions of this form. The completed form must be retained as a permanent record.

Section A: Requestor Information

Date of Request: 4/16/2011

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Address: 21732 N 86th Lane, Peoria AZ 85382

Email Address: jennifer.gresko@mail.riosalado.edu

Phone Number: 623 466 3329 Fax Number: 480-377-4713

Section B: Please check what type of data user you are:

☐ Internal ADE Employee

☒ External User

Section C: Check the following fields that apply regarding the data request

☒ Data will be published

☐ Data resides on ADE Public Website

☒ New Report Request

☐ Data is reported to FEDS

☐ Data Warehouse User (Section E)

☐ Other

☐ Data is for Promotional Purpose

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Due Date:

ASAP

Level of Aggregation:

☐ Raw Data/Student Level

☐ School Level

☐ LEA Level

☒ SEA-Level

Type of Aggregation:

☐ Grade

☐ Ethnicity

☐ Gender

☐ SPED

☐ ELL

☐ Other Support Programs

☐ Assessment

☒ Other (Please Describe): certificate area

Section E: Data Warehouse Users

If you are a trained Data Warehouse User do you see student level non masked data? ☐ Yes ☒ No *BN/A*

If **Yes** what is the Entity Name and ID number? _____

AEDW Role Assigned: ☐ Researcher ☐ Report Author ☐ Reader ☐ Auditor

Users must:

1. Be responsible for the information obtained, use it appropriately, and only for authorized purposes;
2. Only use individual records or anything that could generate personally identifiable information for the validation of queries/programming;
3. Destroy student level records that have been provided from the Data Warehouse student information pursuant to a formal agreement within time limitations defined in the agreement and provide certification to the Data Management staff that such records have been destroyed;
4. Provide to the Data Management team, prior to publication/release, any documents generated as a result of using data received from the Data Warehouse, for review and verification that the stated purpose has been honored;
5. Understand that deliberate or accidental misuse of information may result in one or more of the following: loss of access, disciplinary action, prosecution under the scope of all applicable federal and state laws;
6. Ensure the data obtained is stored and transmitted securely and not available or disclosed to unauthorized parties; and
7. Encrypt the data on mobile computing devices containing any data retrieved from the Data Warehouse that pertains to an individual's level, status, or identity (student or staff).

Users must not:

1. Use the results of information provided by or generated from AEDW data to determine the identity of any student or employee;
2. Allow any unauthorized use of information provided by or generated from the AEDW data;
3. Share any data with any other individual(s) that has the potential to be personally identifiable; and
4. Publish reports with cell sizes of less than 10. (Reports must mask these cells so that personal identities cannot be extrapolated.)
5. Before any data is published it must be submitted to the Data Warehouse Group for approval

Notice of Limitations

The Data Warehouse is best used for doing longitudinal analysis. It acquires its data from the **SAIS Student Details** system, the **AIMS** subsystem, and other ADE managed data repositories. The accuracy of the data in the Data Warehouse is as good as the accuracy of the data in these source systems. The submitted data are screened for adherence to prescribed formats and for logical consistency. Error reports are sent to the submitting schools for the correction of these types of errors only.

1. The data in the SAIS Student Details system are submitted by the LEAs. The AZELLA (language assessments) data prior to 2009 were also submitted by the LEAs. From FY 2009 forward AZELLA data are being submitted by the testing vendor.
2. The data in the AIMS system are submitted by the testing vendor.

Note: The source systems are not formally audited, either by the Auditor General, or by the ADE Auditor. Further, ADE cannot attest to the veracity of these self reported or vendor reported data for their evidentiary value.

The Data Warehouse is not intended and should not be used for the determination or analysis of state funding. The Data Warehouse does not apply the strict business rules used for state equalization funding.

Section F: ADE Employee Who Is Authorizing the Release of Data:

The undersigned ADE employee (a) understands that the information described above may include sensitive, personal, or confidential data, (b) affirms that she or he is duly authorized to release ADE information, and (c) hereby authorizes its release to the entity/person below.

(ADE Employee Signature) (Date)

(ADE Employee Printed Name) (ADE Department or Unit)

APPENDIX C

DEFINITION OF TERMS

For the purpose of clarity and understanding, it is important to define terminology used within this study.

AEPA: The Arizona Educator Proficiency Assessment (AEPA) was developed in 1997 by Evaluation Systems (Pearson Company) via contract, as the result of a mandate of adopted rule changes from the Arizona Board of Education requiring teacher applicants to pass content knowledge exams. The AEPA is an objective (multiple choice) and subjective (essay) examination assessing a candidate's knowledge of Arizona Academic Standards and Arizona Professional Teaching Standards. Candidates must pass a content knowledge area exam for the content area in which they are teaching. To qualify for the intern certificate, the content area exam must be passed prior to issuance. A second exam, professional knowledge, must be passed prior to completion of the intern program and before converting to a provisional teaching certificate.

Alternative Certification: An alternative certification program is a non-traditional means for certifying teacher education candidates. Alternative certification programs may or may not have a set sequence of college credit coursework, and have untraditional methods of demonstrating classroom teaching performance, most often in lieu of traditional student teaching experiences.

Black WaterLearn: The customized online platform for Black Water College. Black WaterLearn is a learning management system that was designed in conjunction with Dell, Microsoft, and Black Water College. Black WaterLearn is used by interns, cadre leaders, and course instructors. The system incorporates the content for courses, email, discussion boards, and grades.

Elluminate: Elluminate is a web-based learning environment that allows cadre leaders and intern teachers to come together and interact through online meetings. Elluminate includes video, voice, text messaging, application sharing, and virtual whiteboards.

Epsilen: An online learning management system which as accessed through Black WaterLearn for the purpose of posting blogs.

Highly Qualified: The reauthorization of the Elementary and Secondary Education Act in 2002 - No Child Left Behind, defined the term highly qualified for newly certified teachers as a teacher who holds a bachelor's degree and has demonstrated competency in each of the academic subjects in which the teacher teaches by passage of a content exam or transcripts of college credit (<http://www.nichcy.org/SchoolsAndAdministrators/Pages/NCLB-HQTdefinition.aspx>).

Induction Program: “Induction” is the period in which the intern teacher is completing certification requirements with Black Water College while teaching in the K-12 classroom. A structured induction program is a variety of methods offered for the purpose of acquainting the intern to the practices, customs, jargon, policies, and methodologies of the profession from both the view point of the college as well as the K-12 school/district (Dill & Stafford, 1996).

Intern Certificate: In 2004 the Arizona Department of Education began issuing a one year teaching certificate which initially was renewable for a second year based upon an institution of higher education statement of successful progress and completion of an initial 45 clock hour/3 credit hour Structured English Immersion course. The Arizona State Board of Education created intern rule changes in March of 2010 stating that this

certificate was now possibly renewable for a third year. Intern certified teachers are considered highly qualified as required by NCLB.

Intern teacher: An intern teacher is a full time student in a teacher preparation program who is also employed as the full time teacher in a K-12 classroom in the areas of elementary, secondary, special education, arts (dance, music, theater, and fine arts) and early childhood. The positions that these teachers fill have previously been the positions which temporary substitutes, long –term substitutes or emergency-certified teachers have held (Dill & Stafford, 1996)/ The highly qualified intern teacher is viewed as preferable to the emergency certified teacher who has no requirements of participation in a teacher preparation program. The intern teacher receives full time first year teacher salary, benefits, and the responsibilities that go with this job description. Each school is required to identify a mentor teacher to assist this intern teacher however the role of the mentor teacher greatly varies depending on the district.

Mentor teachers: A mentor teacher is a veteran teacher who is employed at a district/charter and has been assigned to work with an intern teacher. The college specifically requests a veteran teacher have three or more years of experience, holds a master’s degree, and is knowledgeable about teaching practices as well as school policies/procedures. The mentor teacher is sometimes in the same content area, located at the same school site, and currently a classroom teacher themselves. At other sites, the mentor teacher is from a different content area, is either at a different school or located at the district/charter office, and is not assigned to a current K-12 classroom. Mentor teacher requirements for working with an intern teacher are a school/charter based

decision. In some cases, districts/charters pay for the mentor's work with the intern while others do not.

Phone conferences: Black Water College has a phone system where cadre leaders and intern teachers can call a specific phone number and enter a pre-established code. This code connects the callers onto a single phone line allowing for multiple calls on one phone call.

Resident Teacher (RT) Program: The RT program is a state approved 2-year teacher preparation program in early childhood, elementary, secondary, and special education. Black Water's RT model is designed for a two-year program and reserves the third year option for those with personal hardships preventing them to complete in two-years. College students in the RT program are initially required to have a bachelor's degree from an accredited institution, possess a clear Arizona fingerprint clearance card, pass the content knowledge Arizona Education Proficiency Exam (AEPA), and have a full time teaching position that aligns with the AEPA content area exam taken and passed. Once these requirements are met, a state approved intern teacher preparation program submits a letter of enrollment to the Arizona Department of Education with the purpose of issuing an Arizona Intern Teaching Certificate. As of March 2010, the Arizona State Board of Education passed several new regulatory changes requiring intern teachers to complete a 3 credit or 45 clock hour Structured English Immersion course, and provided for flexibility in completing intern programs in one to three years (rather than two years). Black Water's RT program is considered an institution-based alternative path program given that teachers are employed full time as the classroom teacher while completing certification college credit coursework compared to traditional teacher

preparation programs where K-12 classroom experience takes place at the end of the program requirements in a K-12 classroom with an experienced veteran teacher to support the student teacher.

Skype: Is a free, web-based application that allows cadre leaders and intern teacher to make voice and video calls and chats over the Internet. The free version of Skype allows for one-to-one video/video while the paid version allows for larger voice/video groups.

TaskStream: Is a web-based application which intern students must purchase for \$40 per year. The system is customizable by the college to include lesson planning templates in the EEI format. Students build lesson plans, assessment rubrics on the TaskStream system to share with course instructors as well as cadre leaders for the purpose of evaluation.

Wistia: A paid subscription website for uploading teaching video segments to. Intern teachers and their cadre leaders were grouped together for the purpose of annotating the video's in regards to teaching practices. The annotations are linked to specific timed segments.

APPENDIX D

ACTION PLAN AND TRAINING TIMELINE

Action Plan and Training Timelines

May 2011: Jennifer Gresko (Program Director/Researcher) to identify writers for workshop materials. Need eight orientation workshops and 15 weekly workshops (Total 23). Writing to be complete by June 15, 2011.

May 2011: Jennifer Gresko (Program Director/Researcher) and Instructional Team (5 staff members) to solicit applications select and hire Cadre Leaders by May 31, 2011.

June – August 2011: Intern Program Staff (3) to monitor incoming TIR teachers and place in groups by grade level/content area.

June 2011: Instructional Team and Jennifer Gresko (Program Director/Researcher) to train 20 Cadre Leaders in a one day, eight hour workshop, in-person. Instructional Team and Jennifer Gresko conduct a follow-up two hour virtual meeting on Elluminate.

July 27th, 2011 (7-9 PM): Jennifer Gresko and Instructional Team to conduct a “Kick-Off” meeting with Cadre Leaders virtually on Elluminate.

Weeks 1-2 (9/05 – 9/18/11): i2Teach Orientation Begins (two weeks, nightly Monday-Thursday, 1 hour in length), 1 Formal Evaluation (DATA POINT RQ3: Evaluation Instrument) (in-person within Madison, Virtually out of county) Conducted by Cadre Leader with interns as the participants.

Orientation Session 1: Lions, Tigers, and Bears! Oh My!: Purpose, Structure of sessions, Common vocabulary, Navigating the intern program, Program plans, Important dates, Who to contact, How/What to register, Success tips, ACCUPLACER assessment,

Orientation Session 2: Ready? Set? Go....: The Classroom Environment
Navigating Black WaterLearn, Room setup, Materials, Resources, WWWS
“What Would Wong Say?”, Flip Camera 101

Orientation Session 3: Classroom Management
School wide discipline systems, Classroom system, How to introduce

Orientation Session 4: Communicate, Communicate, Communicate
Strategies for communicating with Parents, Other Teachers, Students,
Lesson objectives, Standards, TaskStream

Orientation Session 5: Instructional Planning #1: Developing an Anticipatory Set and Input (Modeling, Checking for Understanding and Guided Practice)

DATA POINT RQ2: Self-Efficacy Survey Pre-Test,

Orientation Session 6: Instructional Planning #2: Closure, Independent Practice, Remediation, Enrichment, SIOP

Orientation Session 7: Special Education
IEPs, RTI, Working with Parapro's, 504's, Accommodations,

Orientation Session 8: Just the Beginning: Review of Orientation Sessions,
Next steps

Week 3 (9/19-9/25/11): Cadre Leaders to begin weekly virtual - Elluminate sessions lasting 1 hour in length. Date/time to be determined by individual groups and reported to Instructional Team.

Professional Development Session 1: Student Engagement

Mentoring Video Assignment: Record a 3-5 minutes of your classroom time. Upload your video to the annotation site, comment on your own video segment identifying the student engagement happening in segment. Who is engaged? Who isn't engaged? What suggestions do you have for your self to increase student engagement after review your segment?

Reflection Assignment: Reflect on your time in the classroom to this point. How are you feeling emotionally, physically? Do you feel that you are getting through to your most difficult students? What strategies are working? What strategies are not? What are your next steps with student engagement within your classroom?

Discussion Board Tie-in: What you do to motivate students who show low interest in school work?

Week 4 (9/26-10/02/11):

Professional Development Session 2: Instructional Strategies

Mentoring Video Assignment: Record a 3-5 minutes of classroom time demonstrating an instructional strategy. Upload a video that demonstrates an instructional strategy that you are purposely implementing. Provide a description of your strategy that is being implemented and any other contextual or background information. Your cadre leader will provide feedback on this video segment.

Reflection Assignment: How full is your tool belt? Do you feel you have plenty of instructional strategies to choose from? Are there some areas that you are weaker at than others? How are you gauging student comprehension of what you have taught? How are you monitoring and adjusting your lessons based on this information?

Discussion Board Tie-in: How do you provide appropriate challenges for students who need enrichment in the classroom?

Week 5 (10/03 -10/09/2011):

Professional Development Session 3: Parent-Teacher Conferences, Communication, and Volunteering

Mentoring Video Assignment: Record a 3-5 minute segment of you discussing how you will implement parent-teacher conferences, conduct communication with your families, and establish a procedure for volunteering in the classroom. Upload your video to the annotation site. Your cadre leader and peers will comment on your own video segment. You will need to comment of two other cadre members videos prior to the next cadre meeting.

Reflection Assignment: Discuss the pros and cons to having parents and other volunteers in your classroom. Personally reflect on your thoughts about having volunteers in the classroom.

Discussion Board Tie-in: What can you do to make the most out of Parent-Teacher conferences?

Week 6 (10/10 – 10/16/11):

Professional Development Session 4: Assessment

Mentoring Video Assignment: Record a 3-5 minute segment of you discussing how you will implement assessment in your classroom. Specifically, discuss how you will utilize a specific assessment instrument and how you will monitor and adjust classroom instruction/individual student plans based upon the assessment data. Upload your video to the annotation site. Your cadre leader and peers will comment on your own video segment. You will need to comment of two other cadre members videos prior to the next cadre meeting.

Reflection Assignment: How prepared do you feel in effectively assessing your students learning and achievement? Are you prepared to use the data from the assessments to make instructional decisions? Why? Why not?

Discussion Board Tie-in: What assessment strategies have you used successfully?

Week 7 (10/17 – 10/23/11):

Professional Development Session 5: Classroom Management

Mentoring Video Assignment: Record a 40-50 minute segment of your classroom. Select a 3-5 minute segment to upload that demonstrates your

classroom management in action. Provide a description of your classroom management style and program that is being implemented and any other contextual or background information. Your cadre leader and peers will provide feedback on this video segment.

Reflection Assignment: How effectively is your well classroom management system working? What are your struggles? What are your successes?

Discussion Board Tie-in: Share your tips and tricks that are successfully working in your classroom.

Week 8 (10/24 – 10/30/11):

Professional Development Session 6: Reading Instructional Strategies

Mentoring Video Assignment: Record a 3-5 minutes of classroom time demonstrating a reading instructional strategy. Upload a video that demonstrates a reading instructional strategy that you are purposely implementing. Provide a description of your strategy that is being implemented and any other contextual or background information. Your cadre leader and peers will provide feedback on this video segment.

Reflection Assignment: How prepared do you feel in effectively teaching your students in reading? Is this one of your strengths? A weakness?

Discussion Board Tie-in: Share ideas, activities, websites, and other resources for reading instruction that you have successfully used within your classroom.

Week 9 (10/31 – 11/06/11):

Professional Development Session 7: Integrating Technology to Support Student Learning

Mentoring Video Assignment: Record a 40-50 minute segment of your classroom. Select a 3-5 minute segment to upload that demonstrates the integration of technology to support student learning within your classroom. Provide a description of the purpose of the integration and why you believe technology was the best tool to integrate to support student learning specifically in this lesson. Provide any other contextual or background information, as needed. Your cadre leader and peers will provide feedback on this video segment.

Reflection Assignment: When using technology with your students, what are your challenges? Strengths? What could be done to increase your usage of technology in the classroom?

Discussion Board Tie-in: Share ideas, activities, websites, and other resources for utilizing technology in the classroom to support student learning.

Week 10 (11/07 – 11/13/2011):

Professional Development Session 8: Working with ELD students

Mentoring Video Assignment: Record a 3-5 minutes of classroom time demonstrating the implementation of an ELD strategy in your classroom. If you do not have ELD students, record yourself describing how you would implement ELD strategies in the classroom. Upload a video and provide a description of your strategy that is being implemented and any other contextual or background information. Your cadre leader and peers will provide feedback on this video segment.

Reflection Assignment: When working with ELD students, what are your challenges? Strengths? What could be done to increase your skills in this area? If you don't work with ELD students, answer the questions above by thinking of a population of students that you do work with that can be a challenge.

Discussion Board Tie-in: Share ideas, activities, websites, and other resources for working with ELD students.

Week 11 (11/14 – 11/20/2011):

Professional Development Session 9: Special Education

Mentoring Video Assignment: Choose one of the following: 1) Record a 3-5 minutes of classroom time demonstrating your work with a special education student(s). Upload a video and provide a description of the session and how the content being taught is in alignment with the student's IEP. 2) If you do not have special education students in your classroom, create 2 – 3 questions that you could like to ask a special education teacher, coordinator, and director. Video tape your interview. Be sure to obtain written permission. Your cadre leader and peers will provide feedback on this video segment.

Reflection Assignment: When working with special education students, what are your challenges? Strengths? What could be done to increase your skills in this area?

Discussion Board Tie-in: Share ideas, activities, websites, and other resources for working with special education students.

Week 12: (11/21 – 11/27/2011)

No new sessions – Thanksgiving – Make-up week

1 Formal Evaluation during weeks 12-15 (DATA POINT RQ3: Evaluation Instrument)
(in-person within Madison, Virtually out of county)

Week 13 (11/28 – 12/04/2011):

Professional Development Session 10: Differentiating Instruction

Mentoring Video Assignment: Record a 40-50 minute segment of your classroom. Select a 3-5 minute segment to upload that demonstrates differentiating instruction in action. Provide a description of how/why you differentiated instructional and any other contextual or background information. Your cadre leader and peers will provide feedback on this video segment.

Reflection Assignment: Do you differentiate instruction? Why? Why not? What is the important for differentiating instruction? What impact does it have on student learning?

Discussion Board Tie-in: Share ideas, activities, websites, and other resources for differentiating instruction that you have successfully used within your classroom.

Week 14 (12/05 – 12/11/2011):

Professional Development Session 11: Curriculum Mapping

Mentoring Flip Assignment: Record a 3-5 minute segment of you discussing how you created your curriculum map. Describe what you learned from this process. Was it helpful? Did you have any ah-ha's? Upload your video to the annotation site. Your cadre leader and peers will comment on your own video segment. You will need to comment of two other cadre members videos prior to the next cadre meeting.

Reflection Assignment: When going through the curriculum mapping process, what emotions did you go through? What do you think brought these emotions on? Do you see a value for curriculum mapping?

Discussion Board Tie-in: Share your curriculum map and any tips/tricks for creating your map.

Week 15 (12/12 – 12/18/2011):

DATA POINT RQ2: Self-Efficacy Survey Post-Test

Spotlight Session: Learning and the Brain, Dr. Janet Johnson

APPENDIX E

TEACHERS' SENSE OF EFFICACY SCALE

Date:

Directions: This questionnaire is designed to help the TIR program gain a better understanding of the kinds of things that create difficulties for intern teachers. Please indicate your opinions about each of the statements below. Your answers are confidential.

<<Remove Construction Information for Student Use>>

Construct 1: Student Engagement Items 1, 2, 4, 6, 9, 12, 14, 22,

Construct 2: Instructional Strategies Items 7, 10, 11, 17, 18, 20, 23, 24,

Construct 3: Classroom Management Items 3, 5, 8, 13, 15, 16, 19, 21

1. How much can you do to get through to the most difficult students?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

2. How much can you do to help your students think critically?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

3. How much can you do to control disruptive behavior in the classroom?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

4. How much can you do to motivate students who show low interest in school work?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

5. To what extent can you make your expectations clear about student behavior?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

6. How much can you do to get students to believe they can do well in school work?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

7. How well can you respond to difficult questions from your students?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

8. How well can you establish routines to keep activities running smoothly?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

9. How much can you do to help your students value learning?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

10. How much can you gauge student comprehension of what you have taught?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

11. To what extent can you craft good questions for your students?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

12. How much can you do to foster student creativity?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

13. How much can you do to get children to follow classroom rules?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

14. How much can you do to improve the understanding of a student who is failing?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

15. How much can you do to calm a student who is disruptive or noisy?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

16. How well can you establish a classroom management system with each group of students?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

17. How much can you do to adjust your lessons to the proper level for individual students?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

18. How much can you use a variety of assessment strategies?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

19. How well can you keep a few problem students from ruining an entire lesson?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

20. To what extent can you provide an alternative explanation or example when students are confused?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

21. How well can you respond to defiant students?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

22. How much can you assist families in helping their children do well in school?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

23. How well can you implement alternative strategies in your classroom?

9	8	7	6	5	4	3	2	1
A Great Deal	Quite a Bit	Some Influence	Very Little	Nothing				

24. How well can you provide appropriate challenges for very capable students?

9	8	7	6	5	4	3	2	1
---	---	---	---	---	---	---	---	---

A Great Deal Quite a Bit Some Influence Very Little Nothing

Demographic Information (No construct):

Survey Code: _____

34. Gender: Female Male

35. Racial or Ethnic Identity:

American Indian or other Native American

Asian, Asian American or Pacific Islander

Black or African American

White (non-Hispanic)

Mexican, Mexican American, Puerto Rican, Other Hispanic or Latino

Multiracial

Other

I prefer not to respond

36. Years of Teaching Experience:

Less than 1 Year 1 2 3+

37. My age range:

21-29 30-39 40-49 50+

38. Highest Degree Completed:

Bachelor's Master's Doctoral

39. Teaching Certificates Held(Mark all that apply):

Intern Certificate Sub Certificate Teaching Certificate in another area CTE

*The developers of this survey are M. Tchannen-Moran, College of William and Mary and A. Woolfolk Hoy of Ohio State University. Jennifer Gresko, doctoral student at Arizona State University, created additional questions on the survey.

APPENDIX F

PERMISSION TO USE TEACHERS' SENSE OF EFFICACY SCALE



COLLEGE OF
EDUCATION AND
HUMAN ECOLOGY

ANITA WOOLFOLK HOY, PH.D.

PROFESSOR
PSYCHOLOGICAL STUDIES IN EDUCATION

Dear

You have my permission to use the *Teachers' Sense of Efficacy Scale* in your research. A copy of both the long and short forms of the instrument as well as scoring instructions can be found at:

<http://www.coe.ohio-state.edu/ahoy/researchinstruments.htm>

Best wishes in your work,

A handwritten signature in cursive script that reads "Anita Woolfolk Hoy".

Anita Woolfolk Hoy, Ph.D.
Professor

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29 WEST WOODRUFF AVENUE
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APPENDIX G

STUDENT TEACHING ASSESSMENT INSTRUMENT (STAI)

Black Water College On-line Teacher Prep Program

Student Teaching Assessment Instrument

Student Name _____

Evaluator Name _____

Date Evaluated	Type of Evaluation	Evaluator Status	Grade/Subject	School	District
	<input type="checkbox"/> Initial <input type="checkbox"/> Midterm <input type="checkbox"/> Final	<input type="checkbox"/> Cooperating Teacher <input type="checkbox"/> College Supervisor <input type="checkbox"/> Other			

Criteria:

1=Unsatisfactory: Performance of indicator is non-existent, unclear, non-specific and/or lacks specific evidence.

2=Needs improvement: Performance of indicator is inconsistent or used inaccurately, lacks sufficient evidence, is loosely focused, and limited.

3=Satisfactorily: Performance of indicator is used appropriately, shows sufficient evidence and is focused yet limited.

4=Competent: Performance of indicator is obvious, used consistently and appropriately and meets expectations.

5=Commendable: Performance of indicator is clear and convincing, is used consistently and appropriately, and exceeds expectations.

Planning & Preparation for Learning-Centered Instruction	Instruction, Reflection, Monitoring & Adjusting	Classroom Management	Professional Educator
A. _____	A. _____	A. _____	A. _____
B. _____	B. _____	B. _____	B. _____
C. _____	C. _____	C. _____	C. _____
D. _____	Total _____	Total _____	Total _____
Total _____			

Grand Total _____

Total Possible Points 255 points

Rating Scale Range

204 – 255 Proficient
 153 – 203 Basic
 0 - 152 Unsatisfactory

Failure to score above the unsatisfactory level at any point in the student teaching experience will result in immediate withdrawal from the student teaching program.

Lesson plan submitted 24 hours prior to evaluation: Yes or No

Planning & Preparation for Learning-Centered Instruction

**To be used when evaluating written lesson plans.

A. Selects Instructional Outcomes & Objectives

- _____ Includes measurable lesson objectives (related to state standards) (APTS: 1.1, 1.2, CEC: 1.4,7,8)(INTASC 1.7, 3.7, 7.11): _____
- _____ Specifies criteria & performance (APTS: 1.3, 8.10, CEC: 1.4,7,8): _____
- _____ Aligns objectives, activities, and assessment (APTS: 1.3,1.7,1.13, 4.2, 8.4, 8.9, 8.10, CEC: 1.4.7.8)(INTASC 1.1, 1.4): _____
- _____ Total

B. Specifies Teaching Procedures

- _____ Sequences activities appropriately (APTS: 1.11, CEC: 1.4,7): _____
- _____ Provides opportunity for guided/independent practice (APTS: 1.11, CEC: 1.4,7(INTASC 1.4)): _____
- _____ Provides anticipated positive feedback (APTS: 1.11, CEC: 1.4,7): _____
- _____ Provides assessments opportunities (APTS: 1.13, CEC: 1.4,7)(INTASC 1.4, 4.8): _____
- _____ Selects age appropriate materials/activities (APTS: 1.8, 8.3, CEC: 1.4,7): _____
- _____ Total

C. Provisions Made for Differentiation of Instruction (gifted/special needs)

- _____ Includes activities for 2 or more learning styles (APTS: 1.9, 1.11, 8.1, CEC: 1.3,4, INTASC 7.32,7.33): _____
- _____ Plans activities for students needing remediation (APTS: 1.8, 1.9, 8.5, 9.1, CEC: 1.3,4,7, INTASC 3.7): _____
- _____ Plans activities for students needing enrichment (APTS: 1.8, 1.9, 8.5, CEC: 1.3,4,7, INTASC 3.7): _____
- _____ Total

D. Uses Professional Written Communication

- _____ Writes with clear and coherent thought (APTS: 3.5, 7.1, CEC: 6): _____
- _____ Writes with correct grammar, spelling, and punctuation (APTS: 3.5, 7.1, CEC: 6): _____
- _____ Uses appropriate professional language (APTS: 3.5, 7.1, CEC 6): _____
- _____ Total

Instruction, Reflection, Monitoring & Adjusting

*Observation of classroom instruction.

A. Presents Lesson Content

- _____ Secures attention (CEC 4): _____
- _____ Connects to prior learning/knowledge (APTS: 3.3, 3.10, 8.6, CEC: 1.4, INTASC 1.23,3.35): _____
- _____ Explains purpose/objectives (APTS: 3.2, 3.10, 7.5 CEC: 1.4): _____
- _____ Uses variety of teaching methods (APTS: 8.1, CEC: 1.2,3,4 INTASC 2.3,4.11,4.12,4.13): _____
- _____ Initiates learner involvement (APTS: 2.7, 3.12, 3.13, CEC:1, 2, 3, 4, INTASC 3.6,5.22): _____
- _____ Maintains learner involvement (APTS: 2.6, 2.7, 3.12, 3.13, CEC 1,2,3,4 INTASC 3.6,5.22): _____
- _____ Checks for understanding (APTS: 3.15, CEC: 1.4, INTASC 4.8): _____
- _____ Closes interaction appropriately (APTS: 3.1, CEC: 1.4): _____
- _____ Total

B. Communicates Clearly and Accurately

- _____ Provides clear instructions (APTS: 3.5, 3.6, CEC: 4.6): _____
- _____ Solicits learner responses (APTS: 3.12 CEC: 4, INTASC 2.33,5.15,5.22): _____
- _____ Gives feedback during lesson (APTS: 2.8, 3.12, 4.4 CEC: 4.6): _____
- _____ Uses age-appropriate, accurate grammar (APTS: 3.6, 7.1, CEC: 6, INTASC 3.31): _____
- _____ Total

C. Reflects on Teaching, Monitors and Adjusts Performance

- _____ Identifies cues from students (APTS: 3.15, CEC 2,3,4): _____
- _____ Monitors student involvement (APTS: 2.5, 2.7, 3.15, CEC: 2,3,4): _____
- _____ Monitors and adjusts as needed (APTS: 3.6, 7.1 CEC: 6, INTASC 4.33,7.13): _____
- _____ Total

Classroom Management

*Observation of classroom instruction.

A. Teacher Qualities in Relation to Students

- _____ Encourages appropriately (APTS: 2.3, 2.8, CEC: 2.3,5, INTASC 3.25): _____
- _____ Communicates warmth (APTS: 2.8, CEC: 2.3,5, INTASC 5.21): _____
- _____ Deals with learners courteously (APTS: 2.1, 2.8, CEC: 2.3,5, INTASC 2.5, 6.23): _____
- _____ Total

B. Organizes Materials and Teaching Environment

- _____ Is prepared/has materials ready (APTS: 2.9, CEC: 3.4,7): _____
- _____ Begins/ends lessons on time (APTS: 2.9, CEC: 3.4,7): _____
- _____ Maximizes time/pace (APTS: 2.9, CEC: 3.4,7): _____
- _____ Allows appropriate response time (APTS: 2.7, CEC: 3.4,7): _____
- _____ Facilitates smooth transitions (APTS: 3.12, CEC: 3.4,7): _____
- _____ Total

C. Manages Student Behavior

- _____ Communicates positive expectations (APTS: 2.2, 2.3, 2.6, CEC: 2.3, INTASC 2.5,5.14): _____
- _____ Reinforces appropriate behavior (APTS: 2.2, 2.5, 2.6, CEC: 2.3, INTASC 2.5,5.14): _____
- _____ Overlooks inconsequential behavior (APTS: 2.2, CEC: 2, INTASC 5.14): _____
- _____ Applies rules/classroom management plan consistently based on behavior (APTS: 2.2, 2.3, 2.10, CEC: 2.3, INTASC 5.14): _____
- _____ Total

Professional Educator

*Interview with Mentor Teacher and observation.

A. Maintains Professionalism

- _____ Displays professional appearance (APTS: 6.1, CEC: 9): _____
- _____ Demonstrates punctuality (APTS: 6.1, CEC: 9): _____
- _____ Demonstrates positive attitude (APTS: 6.1, CEC: 9): _____
- _____ Demonstrates dependability (APTS: 6.1, CEC: 9): _____
- _____ Demonstrates initiative (APTS: 6.1, CEC: 9): _____
- _____ Total

B. Engages in Professional Development

- _____ Exhibits desire to improve (APTS: 6.1, 6.2, CEC 9, INTASC 9.22): _____
- _____ Exhibits interest in collaboration (APTS: 5.1, 5.2, 5.5, CEC: 9, 10, INTASC 9.33, 9.32, 10.25): _____
- _____ Total

C. Possesses Judgment

- _____ Addresses classroom situations accurately and quickly (APTS: 2.2, CEC: 4): _____
- _____ Demonstrates professionalism and uses diplomacy when dealing with students feelings and opinions (APTS: 2.3, 2.4, 2.8, CEC: 9, INTASC 9.25, 9.33, 10.25): _____
- _____ Maintains positive relationships with others (APTS: 2.1, 2.4, 5.1, 5.2, 5.5, CEC: 9.10): _____
- _____ Total

Signature of Evaluator

Title

Date

[illegible]

APPENDIX H
PRE-CONFERENCE PLAN

Observation Date: _____

Intern Teacher: _____ Date: _____

Cadre Leader: _____ Evaluation #: _____

I. Introduction

a. Greeting/Establish length of session

b. Review purpose for pre-conference

II. Discussion of Classroom Context (Make-up of students, specific student issues, classroom configuration, etc.)

III. Discussion of Written Lesson Plan (Context of the lesson in the larger unit plan, assessment information, EEI lesson components)

IV. Discussion of student engagement, instructional strategies, and classroom management.

Student engagement:

Instructional strategies:

Classroom management:

V. Recommendations

*Form adapted from NIET Evaluation System Handbook, 2010.

APPENDIX I
POST-CONFERENCE PLAN

Intern Teacher: _____

Date: _____

Cadre Leader: _____

Evaluation #: _____

I. Introduction

- a. Greeting/Establish length of session
- b. Review purpose for post-conference
- c. General impression question

II. Reinforcing the Teacher (Relative Strength)

- a. Reinforce the Objective
- b. Self-reflection Question
- c. Evidence: Identify what the teacher said and did well. Recommend action to continue practice and elicit feedback.

III. Refining the teacher's skill (Area for Improvement)

- a. Refinement Objective
- b. Self-reflection question
- c. Evidence: Identify where teacher can improve
- d. Provide an example based on best practice

IV. Discussion of student engagement, instructional strategies, and classroom management.

Student engagement:

Instructional strategies:

Classroom management:

V. Review Scores and Evidence

*Form adapted from NIET Evaluation System Handbook, 2010.

APPENDIX J
THEME CHART

Research Question	Theme	Key Assertion
<p>1. <i>To what extent does a multicomponent distance learning induction program impact first year intern teachers' sense of self-efficacy in the areas of student engagement, instructional practice, and classroom management? In what ways do the intern teachers' student engagement, instructional practice, and classroom management change during the induction process?</i></p>	<p>Theme 1: Intern teachers request additional opportunities to build relationships with other education professionals as they attribute their successes in the classroom to networking with their peers.</p> <p>Theme 2: Intern teaching skills were positively impacted due to feedback by the cadre leader in the areas of student engagement, instructional practices and classroom management.</p> <p>Theme 4: Intern teachers made progress in the area of student engagement; however, as identified in the survey, they do not feel more efficacious in this area. Interns and cadre leaders worked on engagement and appear to have made progress in the area of student engagement (as identified in the pre/post qualitative STAI analysis).</p> <p>Theme 5: Intern teachers applied concepts taught in Black Water College courses to the K-12 classroom.</p>	<p>First year intern teachers participating in a multicomponent induction program perceive themselves as being more efficacious in the areas of instructional practice and classroom management as compared to student engagement.</p>
<p>2. <i>In what ways do intern teachers feel supported in a distance learning induction program?</i></p>	<p>Theme 1: Intern teachers request additional opportunities to build relationships with other education professionals as they attribute their successes in the classroom to networking with their peers.</p> <p>Theme 4: Intern teachers made progress in the area of student engagement; however, as identified in the survey, they do not feel more efficacious in this area. Interns and cadre leaders worked on engagement and appear to have made progress in the area of student engagement (as identified in the pre/post qualitative STAI analysis).</p> <p>Theme 5: Intern teachers applied concepts taught in Black Water College courses to the K-12 classroom.</p>	<p>Relationships with other educators support an intern teacher emotionally and pedagogically.</p>

	Theme 6: Black Water College enables career success.	
<i>3. How do intern teachers struggle in their first year of teaching?</i>	Theme 3: Intern teachers identified struggles during the intern program.	Intern teachers struggle with work-life balance.
<i>4. How do the intern teacher evaluations on the Student Teaching Assessment Instrument (STAI) in the areas of student engagement, instructional practices, and classroom management change from the September/October observation to the November/December observation? What were the findings of the cadre leader in regards to the intern teachers' performance?</i>	<p>Theme 2: Intern teachers experience success related to student engagement, and instructional strategies.</p> <p>Theme 4: Intern teachers made progress in the area of student engagement; however, as identified in the survey, they do not feel more efficacious in this area. Interns and cadre leaders worked on engagement and appear to have made progress in the area of student engagement (as identified in the pre/post qualitative STAI analysis).</p>	Cadre leaders observed intern teachers as having improved their skills in student engagement, instructional practices, and classroom management.

APPENDIX K
CODES AND CATEGORIES

Codes	Category
Positive Outlook – Administrative, Principal Support, District Support, District Initiatives, Negative Outlook---- School/District, Lack of Support General, Positive Outlook - Department Chair	Support from District and/or Administrative Level
Positive Outlook - Staff Peers, Relationships with General Ed Teachers, Relationships with Special Education Teacher, Networking & Sharing with Peers, Relationships with Rio Peer	Networking and/or Support from Peers
Positive Outlook - Student Achievement, Positive Outlook – Students, Data Driven Assessment	Student Achievement
Caring, Respect, High Expectations, Relating to Students, Celebrating Student Success, Cultural	Affective Traits
Positive Outlook – Emotional, Positive Outlook – Physical, Negative Outlook – Emotional, Negative Outlook – Physical, Teacher Feelings, Positive Outlook – Self	Intern Personal Feelings and Well-Being
Teacher Behavior, Tone, Technology - Teacher Behavior, Teacher Behavior ELD, Other duties as assigned, Improvement – Organization organizational Strategies, Professional Development, Family Commitments, Improvement - Time Management, Positive - Time Management, Work Load	Teacher Behaviors impacting student engagement, instructional practices, and classroom management
Cadre Leader Support, Cadre Leader Behavior, Cadre Leader Strategy Implementation, Same different subject areas	Cadre Leader References

Instructional Strategy, Monitor and Adjusting, Application of theory to practice, Positive Outlook - Instructional Strategies, Negative Outlook - Higher level questioning, Improvement – Absences and Make-up Work, Beginning of the Year, Differentiating Instruction, Improvement - Differentiating Instruction	Instructional Practices
Student Engagement	Student Engagement
Negative Outlook - Classroom Management, Positive Outlook - Classroom Management, Improvement - Classroom Management, Classroom Environment, Classroom Management Strategy	Classroom Management
Classroom Volunteers, Classroom Volunteers Distraction, Classroom Volunteers Behavior, Classroom Volunteer Communication	Outside Assistance in the Classroom
Black Water Coursework, Black Water Expectations	Black Water College Impact to Classroom
At-risk populations - Difficult ED students, Challenging Students	Working with Difficult Students
Special Education - Self-Contained, Support - Itinerant Assistant, SPED – IEPs, SPED Work Load, SPED - Teacher Behavior, Communication with SPED Teachers, Negative Outlook – SPED, Lack of Support - Itinerant Assistance	Special Education

Low students, ELD Students, ELD Instructional Strategies	At-risk Populations
Reading Instruction in Content Area, Reading Instruction Support, Reading Instruction Teacher Behavior, Reading Program, Improvement – Reading, Strength – Reading, Positive Outlook -Teaching Reading, Positive Outlook – Reading	Reading Practices Impacting the Classroom
Teaching Students Technology – Improvement, Technology Usage - Positive Outlook, Technology - Lack of Equipment, Technology - Instructional Strategy	Technology Practices Impacting the Classroom
Field Experience Observations, Observations – videos, Video, student observations	Observations of Self or Others Impacting Instructional Practices
Student Motivation, Student Behaviors, Student Responsibility	Student Behaviors Impacting Student Engagement, Instructional Practices, and Classroom Management
Mentor Teacher Support, Mentor Teacher Behaviors	Mentor Teacher Behaviors Impacting Student Engagement, Instructional Practices, and Classroom Management
Improvement - Lesson Planning, Positive Outlook - Lesson Planning	Planning for Instruction
Flip Camera Issue, Downloading Issue, Wistia Issue	Flip Camera and Technical Issues

APPENDIX L

COMPLEMENTARITY CHART

Quantitative Data				Qualitative Data			
RQ1	Data Collection Tool	Construct	Data Analysis	Data Collection Tool	Data Analysis	Themes	Key Assertions
To what extent does a multicomponent distance learning induction program impact first-year intern teachers' sense of self-efficacy in the areas of student engagement, instructional practices, and classroom management? In what ways do the intern teachers' student engagement, instructional practice, and classroom management change during the induction process?	Teachers' Sense of Self-Efficacy Survey N=29	Construct 1: Student Engagement Items 1, 2, 4, 6, 9, 12, 14, 22 Construct 2: Instructional Strategies Items 7, 10, 11, 17, 18, 20, 23, 24 Construct 3: Classroom Management Items 3, 5, 8, 13, 15, 16, 19, 21	Repeated measures analysis of variance (Anova) Run a paried-samples t test on each construct. Request descriptive statistic and effective size-show statistically significant growth, compares two means. Is this likely to be due to chance? P=.05	Blogs N=74 Video Annotations N=70 STAI Comments N=64	Open coding Open coding Open coding	1, 2, 4, 5	First year intern teachers participating in a multicomponent induction program are more efficacious in the areas of instructional practice and classroom management as compared to student engagement.

All instruments of this study align with the constructs of student engagement, instructional strategies, and classroom management. The data from the STAI quantitative data from the STAI will complement the qualitative data of the comments from the blogs, video annotations, and STAI. This information will not only demonstrate how the evaluations may in the constructs have changed but may help to inform as the evaluations change does this impact the teachers' sense of self-efficacy as seen in RQ1. The data from RQ3 also complements the data in RQ2 as teachers STAI improves/worsens how does this complement the data as to how intern teachers feel supported in a distance learning induction program.

Quantitative Data				Qualitative Data			
RQ2	Data Collection Tool	Construct	Data Analysis	Data Collection Tool	Data Analysis	Themes	Key Assertions
In what ways do intern teachers feel supported in a distance learning induction program?				Blogs N=74	Open coding	1, 4, 5, and 6	Relationships with other educators support an intern teacher emotionally and pedagogically.
				Video Annotations N=70	Open Coding		

Quantitative Data				Qualitative Data			
RQ3	Data Collection Tool	Construct	Data Analysis	Data Collection Tool	Data Analysis	Themes	Key Assertions
How do intern teachers struggle in their first year of teaching?	Student Teaching Assessment – Scoring Scale (N=64)	Construct 1: Student		Blogs N=74	Open coding	3	Intern teachers struggle with work-life balance.
		Construct 2: Instructional Strategies		Video Annotations N=70	Open coding		
		Construct 3: Classroom Management		STAI Comments N=64	Open coding		

Quantitative Data				Qualitative Data			
RQ4	Data Collection Tool	Construct	Data Analysis	Data Collection Tool	Data Analysis	Themes	Key Assertions
How do the intern teacher evaluations on the Student Teaching Assessment Instrument (STAI) in the areas of student engagement, instructional practices, and classroom management change from the September/October observation to the November/December observation? What were the findings of the cadre leader in regards to the intern teachers' performance?	Student Teaching Assessment Instrument – Scoring Scale (N=64)	Construct 1: Student Engagement Construct 2: Instructional Strategies Construct 3: Classroom Management	Repeated measures analysis of variance (Anova) Run an anova on each construct. Sample size over 10 request descriptive statistic and effective size- show statistically significant growth, compares two means. Is this likely to be due to chance? P=.05	Student Teaching Assessment Instrument – Comments (N=64)	Opening coding	2 and 4	Intern teachers improved their skills in student engagement, instructional practices, and classroom management.